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ABSTRACT

This book examines the role of women's colleges in the United States from the early 1800s to the present. It reviews how they began, how they changed as more colleges became coeducational, and the legality of publically supported single-sex colleges. The book also looks at what women's colleges are like today and examines differences in institutional effects for students who choose to attend women's colleges versus those who attend coeducational institutions. The four chapters, written by different authors, are titled: (1) "Women's Colleges in the United States, A Historical Context" (Elizabeth DeBra); (2) "Women's Colleges in the United States, Recent Issues and Challenges" (Irene Harwarth and Florence Fasanelli); (3) "Women's Colleges in the United States, A Statistical Portrait" (Irene Harwarth); and (4) "Women's Colleges in the United States, An Overview of Research and Questions for the Future" (Mindi Maline). An appendix contains 18 tables with data on enrollment by size and type of institution, by geographic region, and for selected years; degrees awarded; staffing at private 4-year colleges by occupational category, sex, and Carnegie classification; and average salary of full-time faculty at women's colleges by sex and Carnegie classification. (Contains 100 references.) (CH)

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Women's Colleges in the United States

History, Issues, and Challenges

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Women's Colleges in the United States

History, Issues, and Challenges

Irene Harwarth
Mindi Maline
Elizabeth DeBra

U.S. Department of Education
Richard W. Riley
Secretary

Office of Educational Research and Improvement
Ramon C. Cortines
Acting Assistant Secretary

National Institute on Postsecondary Education, Libraries, and Lifelong Learning
Carole Lacampagne
Director

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Foreword

Women's colleges have had a long and prestigious role in the education of American women. They have prepared women for leadership roles in society throughout their history and have adjusted their curricula and focus as women have entered new arenas in the workforce. This volume provides a brief history of women's colleges in the United States in the context of social and legislative issues that have affected our country; it looks at data on women's colleges today and compares these data with those of all colleges and universities and with colleges of similar characteristics as defined by Carnegie classifications; and it reviews the literature on research about women's colleges. In doing so, we try to answer two questions: How have women's colleges managed to survive in an era of coeducational institutions and equal opportunities in education for women? What are the unique features of women's colleges that make them attractive to large numbers of young women?

This report is one of the first staff-produced ventures of the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI). PLLI is one of five research institutes of the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education. Among PLLI's missions, mandated by its legislative authorization, is to examine the role of "special mission" institutions of higher education (including historically black colleges and universities, Hispanic-serving colleges, tribal colleges, and women's colleges) in providing "access, excellence, and equal opportunity in higher education."

Unlike women of past generations, today's women have many choices in selecting the college or university they wish to attend. Yet many young women continue to select women's colleges because of their rich traditional heritage of serving the educational needs of women. Women's colleges have a history of offering access, excellence, and equal opportunities in higher education. This volume offers insights into the continuing significant role of women's colleges in higher education. We hope that you will find it a helpful document.

Carole Lacampagne
Director, National Institute on Postsecondary Education, Libraries, and Lifelong Learning
U.S. Department of Education

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Executive Summary

Definition of a Women's College

Women's colleges are colleges that identify themselves as having an institutional mission primarily related to promoting and expanding educational opportunities for women. Most institutions of higher education currently have majority female enrollments; women's colleges have predominantly female enrollments.

How Women's Colleges Began

The development of private secondary schools for young women ("seminaries") during the early 1800s was the beginning of an interest in furthering educational opportunities for women. Women's colleges were founded during the mid- and late-19th century in response to a need for advanced education for women at a time when they were not admitted to most institutions of higher education. Societal trends such as an increase in labor-saving devices in the home, a shortage of teachers due to the growth of common schools, a proliferation of reading materials for women, and more philanthropic and some limited employment opportunities for women due to the Civil War led to an increased demand for higher education for women.

Independent nonprofit women's colleges, which included the "Seven Sisters" and other similar institutions, were founded to provide educational opportunities to women equal to those available to men and were geared toward women who wanted to study the liberal arts. These were largely located in the Northeast. Southern women's colleges were small schools, mostly affiliated with various Protestant churches. As educational opportunities in the South during the 1800s were limited to whites only, some higher education institutions for blacks sprang up during the post-Civil War period, including women's colleges founded especially to serve black women. Two of these, Bennett College and Spelman College, are the only black women's colleges today. As the Catholic population in the United States grew due to increases in immigration, the Catholic Church found a need for women's colleges to educate the daughters of Catholic families; and there was also a need for higher education for nuns. There were some movements in various states to provide public institutions of higher education open to all women in the state. Three of these institutions, Douglass College, a part of Rutgers University in New Jersey, Texas Woman's University, and the Mississippi University for Women, remain today.

Women's Colleges Changed as More Colleges Became Coeducational

The decades after World War II saw an explosion in the numbers of students entering higher education institutions due to returning veterans and later the "baby boom." Numbers of public higher education institutions increased to meet the new level of demand. During the 1960s and 1970s, due to social and legislative changes, several institutions of higher education that had been previously all-male opened their doors to women. Many women's colleges either became coeducational themselves, merged with all-male or coeducational institutions, or closed due to declining enrollment and financial problems related to the increased

competition in higher education. As a result, the number of women's colleges shrank from over 200 in 1960 to 83 in 1993.

Some women's colleges, however, reaffirmed their mission, believing that it was important to continue to offer an all-female educational environment for women. These colleges enhanced their connections with other institutions, and added new programs designed to appeal to students beyond the traditional college age. A few women's colleges were able to weather the changes of the past few decades due to generous endowments providing financial security and loyal alumnae who strongly supported their institution's decisions to remain all-female.

The Legality of Publicly Supported Single-Sex Colleges

In 1982, the Mississippi University for Women was sued by a man seeking admission to the nursing program, and the university was ordered by the United States Supreme Court to admit men. The Court found that the university's policy of excluding males from admission to the School of Nursing not only violated the Equal Protection Clause of the 14th Amendment, but also was not beneficial to women because this policy furthered the image of nursing as "women's work." Public women's colleges today allow men to enroll, but retain a specific mission to serve the higher educational needs of women. In 1996, the Virginia Military Institute (VMI), after a long legal battle, chose to become a coeducational public institution rather than a private institution. The Citadel, of South Carolina, also decided to become a coeducational institution, thus ending the history of all-male public institutions and all-male military institutions in the United States.

What Women's Colleges Look Like in the 1990s

Women's colleges today are largely private 4-year institutions. They are more likely to be independent nonprofit institutions or affiliated with the Catholic Church, to be located in the Northeastern U.S., and to have smaller enrollments than most institutions of higher education. Analysis of data provided to the U.S. Department of Education by women's colleges reveals that enrollment at women's colleges in Fall 1993 did have notable representation of part-time students, members of racial and ethnic minorities, and older undergraduate women students. In 1992–93, women's colleges conferred 25,000 degrees, a little over one percent of all degrees conferred that year. Almost 17,000 of the 25,000 degrees were Bachelor's degrees.

Special Circumstances Continue to Make Women's Colleges Attractive to Female Students

Traditionally male-dominated fields include mathematics, computer sciences, and physical sciences. There is evidence that when private 4-year women's colleges were compared with all private 4-year institutions by Carnegie classification, they conferred upon women equal or larger proportions of bachelor's degrees in traditionally male-dominated fields than the norm for private 4-year colleges within their Carnegie classification. However, there is more dramatic evidence that women are represented in greater numbers in the professional staffs and faculty of women's colleges than at similar institutions of higher education. For Fall 1993, women were over 70 percent of all executive, administrative, and managerial positions at women's colleges, and were over half of all full-time and part-time faculty, these were much higher percentages than the norm for private 4-year colleges within each Carnegie

classification. Also, as full-time faculty at women's colleges, women received higher average salaries than women at similar institutions of higher education.

The Institutional Effects of Women's Colleges

Some research on women's colleges includes findings that these colleges encourage leadership skills in women, provide women with more female role models, and that they encourage women to focus on traditionally male-dominated fields of study. However, other research finds that factors such as the level of selectivity of the college may play a part in the institution's positive effects on students.

A review of the research on women's colleges reveals that this research focuses primarily on studying the effects of attending a single-sex institution on the educational outcomes and career aspirations of young women. Much of this research seeks to ascertain differences between women who chose women's colleges and those who attend coeducational institutions.

Contents

Foreword iii

Acknowledgments v

Executive Summary vii

List of Figures and Tables xii

Chapter 1: Women's Colleges in the United States, A Historical Context 1
Elizabeth DeBra

Chapter 2: Women's Colleges in the United States, Recent Issues and Challenges . . . 21
Irene Harwarth with Florence Fasanelli

Chapter 3: Women's Colleges in the United States, A Statistical Portrait 43
Irene Harwarth

Chapter 4: Women's Colleges in the United States, An Overview of Research and Questions for the Future 83
Mindi Maline

Bibliography 95

Appendix 101

List of Appendix Tables 103

List of Figures and Tables

Figures

Figure 3.1: Women's colleges in the United States: Fall 1993 59

Figure 3.2a: Enrollment at women's colleges: Fall 1976–Fall 1993. 60

Figure 3.2b: Enrollment at all institutions of higher education: Fall 1976–Fall 1993. . 61

Figure 3.3: Percent growth in female enrollment at women's colleges and all institutions of higher education between Fall 1976 and Fall 1993.. 63

Tables

Table 3.1: Number and percent of institutions by size of enrollment, all institutions of higher education, and women's colleges: Fall 1993. 74

Table 3.2: Number and percent of institutions by affiliation, all institutions of higher education, and women's colleges: Fall 1993. 75

Table 3.3: Number and percent of institutions and fall enrollment in women's colleges and all institutions of higher education, by region: 1993 76

Table 3.4: Enrollment at women's colleges and all institutions of higher education: Fall 1976–Fall 1993 77

Table 3.5: Enrollment of women at women's colleges and all institutions of higher education, by attendance status: Fall 1976 and Fall 1993. 78

Table 3.6: Enrollment of undergraduate women at women's colleges and all institutions of higher education, by age: Fall 1989 and Fall 1993 79

Table 3.7: Enrollment of women at women's colleges and all institutions of higher education, by race/ethnicity: Fall 1976 and Fall 1993. 80

Table 3.8: Enrollment of black women at Historically Black Women's Colleges and all women's colleges: Fall 1976 and Fall 1993. 81

Table 3.9: Female undergraduate enrollment at private 4-year women's colleges, and all private 4-year institutions, by Carnegie classification: Fall 1993. . . . 82

Table 3.10: Distribution of undergraduate females by age at private 4-year women's colleges and all private 4-year institutions, by Carnegie classification: Fall 1993. 83

Table 3.11: Distribution of undergraduate females by race/ethnicity at private 4-year women's colleges and all private 4-year institutions, by Carnegie classification: Fall 1993 84

Table 3.12: Distribution of undergraduate females by attendance status at private 4-year women's colleges and all private 4-year institutions, by Carnegie classification: Fall 1993. 85

Table 3.13: Degrees awarded by women's colleges and by all institutions of higher education: 1992–93 86

Table 3.14: Number and percent of bachelor's degrees awarded to women at private 4-year women's colleges and all private 4-year institutions classified as Baccalaureate I, by field: 1992–93. 87

Table 3.15: Number and percent of bachelor's degrees awarded to women at private 4-year women's colleges and all private 4-year institutions classified as Baccalaureate II, by field: 1992–93. 88

Table 3.16: Number and percent of bachelor's degrees awarded to women at private 4-year women's colleges and all private 4-year institutions classified as Master's I, by field: 1992–93 89

Table 3.17: Number and percent of bachelor's degrees awarded to women at private 4-year women's colleges and all private 4-year institutions classified as Master's II, by field: 1992–93. 90

Table 3.18: Degrees conferred upon women by women's colleges and by all institutions of higher education, by level: 1976–77 and 1992–93. 91

Table 3.19: Number of staff and percent of female staff at private 4-year women's colleges and all private 4-year institutions, by occupational category and Carnegie classification: Fall 1993. 92

Table 3.20: Average salaries of full-time faculty at private 4-year women's colleges and all private 4-year institutions, by sex and Carnegie classification: 1993–94 93

Chapter 1:

Women's Colleges in the United States, A Historical Context

Introduction

Women's colleges in the United States today are part of a wide range of higher education options available to women. The colleges emerged at a time when men's access to higher knowledge was expanding, but women's access was very limited. The founders of the women's colleges were believers in women's intellectual abilities and advocates for their participation in society, and in some cases they also emphasized the necessity of training women in practical trades so that they might have vocations. By studying the history of women's colleges, we can gain a more thorough understanding of their role in American higher education today.

Founding, Philosophy, and Origins: The Demand for Girls' Seminaries and Women's Colleges

Early History

Before the Civil War, only three private colleges admitted women. All were in Ohio: Antioch, Oberlin, and Hillsdale (now in Hillsdale, Michigan). In addition, only two public universities, the University of Iowa and the University of Deseret (which later was renamed the University of Utah), admitted women. However, the Civil War brought with it a general decline in (male) student enrollments, making some postsecondary institutions more agreeable to admitting women. By 1870 eight state universities accepted women.[1]

The precursors to women's colleges were private girls' "academies" or "seminaries," secondary schools that were increasingly popular from the 1820s on. (One author notes that even before the American Revolution, boys had access to grammar schools, academies, and seminaries.)[2] Seminaries offered girls more liberal education than they had received before, and girls in all regions of the country took advantage of the studies offered there. As one observer stated: "Because a girl might as maid or widow have to earn her living, because marriage was less certain than it had been with the present surplus of females in the population, because training as a teacher helped a woman bring up her children—all these reasons paved the way for the seminaries."[3] These early secondary schools for girls included institutions such as the Adams Female Academy in Londonderry, New Hampshire; the academy founded by Emma Willard in Troy, New York; the Salem Female Academy of Winston-Salem, North Carolina; the Judson Female Institute at Marion, Alabama (led by Milo P. Jewett, later a leader at Vassar College); and Wheaton Female Seminary in Norton, Massachusetts (later Wheaton College).

As the seminary movement grew, some problems and questions became evident. One group of critics, including Emma Willard, argued that the seminaries should be reformed by strengthening teaching of the core academic subjects. A second group argued that seminaries were insufficient and suggested that a more durable institution—a women's college—be

founded. Catherine E. Beecher, who had worked to establish seminaries for women, was leader of the group arguing that seminaries were inadequate as the sole educational institutions for women. In 1851, she published *True Remedy for the Wrongs of Women*, in which she pointed out that men had secured educational advantages through establishment of a college system with permanent endowments and more autonomous faculties.[4]

According to Beecher, seminaries could not offer sufficient, permanent endowments, buildings, and libraries. She thought it was of the utmost importance that women's colleges have "a corporation whose duty it is to perpetuate the institution on a given plan."[5] This board of trustees would control the faculty, rather than one or two principals, as was the case in seminaries. The advantage of a board of trustees, Beecher wrote, would be "to secure the highest class of teachers, by insuring them a liberal and permanent support...it also secures protection from those vacillations of public favor which are constantly destroying all institutions not thus sustained."[6] While seminaries offered women rigorous programs of study, Beecher knew that colleges for women—like those for men—would offer a higher level of instruction, because as a regular course of study was developed, faculty would benefit from division of teaching time, thus gaining time to further their scholarly activities.[7]

A powerful proponent of women's higher education during the first part of the 19th century was Mary Lyon, the founder of Mount Holyoke College in South Hadley, Massachusetts. Educated at a female academy in Byfield, Massachusetts, Lyon was befriended there by a teacher several years her elder, Zilpah Grant. Together, the two proceeded to found Ipswich Female Seminary in Massachusetts, where standards of personal conduct and discipline were emphasized, along with a rigorous curriculum. The seminary was distinguished by teachers' emphasis not only on comprehension, but on questioning and analysis; historian Helen Horowitz writes that students there were encouraged to examine texts with a critical eye and question the authors' views.[8]

However, Mary Lyon eventually saw the limitations of the seminary, particularly its limited finance. Without a stable endowment, she was unable to draw her "favorite students, the daughters of poor New England farmers," to the seminary.[9] In 1836, with the assistance of several prosperous church deacons, she founded Mount Holyoke Female Seminary (today, Mount Holyoke College). Mount Holyoke's significance is that it became a model for a multitude of other women's colleges throughout the country, as will be discussed later in this chapter.

Several distinct societal trends in the early-to-mid 19th century contributed to a rise in demand for the education of women, including higher education. First, it was assumed that women and men had separate spheres—and that a woman's place was in the home. A major part of the woman's sphere was child-rearing, which included imparting civic virtue and knowledge. Part of the argument for women's education was based on the increasing realization that the republic needed an educated citizenry and that this in turn required the nurturing of the young by more educated mothers.[10]

In addition, the women's rights movement, which had gained momentum in the wake of the anti-slavery movement, was a major influence in the founding of women's colleges, especially in the Northeast. In opposition to the prevalent notion of separate spheres for men and women, an increasing number of reformers asserted that women were endowed with capacities equal to those of men. As women leaders called attention to their status as second-

class citizens, they naturally looked to education as a means of attaining the political and legal goals of equality.[11] The colleges and universities for young men were the obvious standard for comparison. The reformers interested in educational equality asked why there could not be similar institutions for women.

Social historians also attribute the demand for higher education for women in the mid-to-late 19th century to four other societal trends of the time. First, the growth of the common public school system inculcated in girls a desire for further learning—particularly girls who had not been able to attend the more expensive seminaries. With the growth of this system of common schools there was a simultaneously increasing demand for teachers. As employment opportunities in elementary and secondary schools grew, higher education for women became more acceptable, and the public acknowledged its necessity.[12] Women were increasingly regarded as better teachers than men; the President of Brown University wrote in 1854 that "women have a much greater natural adaptation to the work of instruction than men." College-educated men were not meeting these needs, because teaching constituted a relatively low-status occupation. Women were cheaper to hire as public school teachers, too; one historian writes that throughout the 1800s, "the salaries of the men teachers were quite commonly from two to four times those paid to women."[13]

Second, over this period there was also a proliferation of literature for women, promoting women's literary interests and tendencies to read widely. Moreover, the gas light and improved oil lamps were making it possible to use the evening hours for reading.[14]

Third, women's higher education was made possible by an increase in their leisure time, as the industrial revolution brought with it more domestic labor-saving devices: "Spinning and weaving were no longer household tasks. And the invention of such labor-saving devices as the cook stove, the sewing machine, and even the match, were freeing women from much household drudgery."[15]

Finally, there was also the growth of employment opportunities in some areas brought about by exposure to the outside world during the Civil War.[16] The 1870 census revealed at least one woman in each of 338 classified occupations, though 93 percent of all women workers fell into the following seven categories: domestic service, agricultural laborers, seamstresses, milliners, teachers, textile mill workers, and laundresses.[17] So while women were working, the range of fields in which they were employed was not broad. Still, the growth of women in the workforce contributed to social awareness that education might better prepare them to work. During the Civil War women had become more active in philanthropic causes: they made bandages, helped care for the wounded, and knit garments. Indeed, women were at the forefront of the abolitionist movement.[18]

It is difficult to judge which was the first women's college. Georgia Female College (today Wesleyan College in Macon, Georgia) was the first school chartered in the United States in 1836, to confer on girls "all such honors degrees and licenses as are usually conferred in colleges and universities." Wesleyan College is the oldest women's college that has neither closed nor become coeducational. Scholars observe, however, that Mary Sharp College in Winchester, Tennessee in 1851, was the first U.S. women's college to require both Latin and Greek in a four-year course, and give an A.B. degree comparable to those awarded by men's colleges.[19] Mary Sharp College closed in 1896. Elmira College in Elmira, New York, founded in 1855, "is the oldest existing women's college in the United States which succeeded in

attaining standards in a fair degree comparable with men's colleges at the very beginning of her career." (Elmira College became coeducational in 1969.) Ten years later, in 1865, Vassar College (Poughkeepsie, New York) was the first to have an adequate endowment and, like Elmira, attain standards comparable to those of the men's colleges[20]

The founders of women's colleges had various goals in mind: one was teacher training and hence the development of public education; another was religious and health education; and yet another, as with Smith College (Northampton, Massachusetts) and Vassar, was providing a woman "the best methods to perfect her intellect." Sophia Smith's will, providing for Smith College in 1875, stated that it is "with the design to furnish my sex means and facilities for education equal to those which are afforded now in our Colleges for young men."[21]

The education of the first president of Bryn Mawr, M. Carey Thomas, provides an example of the academic barriers women faced in the late 19th century. After graduation from Cornell University, Thomas was denied access to graduate study at any American university; the most she could acquire was non-degree study at Johns Hopkins. Finally, she received a doctorate in literature from the University of Zurich, summa cum laude. It became evident to her that resources were needed for women to receive an education equal to that of men, and she sought to ensure that Bryn Mawr—opening in 1885—had rigorous academic standards.[22]

Perhaps typical of the founders' expectations for women was Wheaton College, which historian Louise Boas wrote:

> ... was to be neither a charitable institution nor a fashionable school. It was to train some of its pupils to be teachers but its training would be mainly for those who would become wives and mothers. For them education was of the greatest importance that they might live their own lives intelligently; and intelligently guide the lives of those who would be entrusted to their care.[23]

This description illustrates the scope of the ambitions that the founders had for young women graduates in the late 19th century. Only in the later 20th century have women's colleges emphasized the expectations that women could enter any sphere, including those traditionally reserved for men.

Opposition to Women's Colleges

When reformers and philanthropists first attempted to press beyond secondary-level female seminaries to found colleges for women, their goals were often derided. Public opinion did not consider women's colleges either a wise investment or worthwhile educational endeavor. Opponents argued that they could not prepare women for professions, or provide them a high-quality of education on a par with men's. One example was Charles W. Eliot, the President of Harvard College, who was against the formation of the colleges, arguing that women were not as intelligent as men. In 1899, Eliot, a leading educational reformer of the day, delivered a speech at the inaugural of the new president of Wellesley, in which he declared his views about colleges for women:

> Women's colleges should concentrate on an education that will not injure women's bodily powers and functions. It remains to demonstrate what are the most appropriate, pleasing, and profitable studies for women, both from the point of view of the individual and the point of view of society; and this demonstration must be

> entirely freed from the influence of comparisons with the intellectual capacities and tastes of men. It would be a wonder, indeed, if the intellectual capacities of women were not at least as unlike those of men as their bodily capacities are.[24]

As Eliot's speech reveals his conviction that women were different from men intellectually; and his strong implication was that women were not capable of doing the rigorous academic work that colleges required. M. Carey Thomas, however, responded to Eliot's ideas in an article published in 1901, in which she advocated a common curriculum for men and women in higher education. As long as men and women were to associate together in professional life, should women's preparation for the professions differ from men's? Thomas offered this illustration of a challenge that must be surmounted the same way, regardless of sex:

> Given two bridge-builders, a man and a woman, given a certain bridge to be built, and given as always the unchangeable laws of mechanics in accordance with which this special bridge and all other bridges must be built, it is simply inconceivable that the preliminary instruction be given to the two bridge-builders should differ in quantity, quality or method of presentation because while the bridge is building one will wear knickerbockers and the other a rainy-day skirt. You may say you do not think God intended a woman to be a bridge-builder. You have, of course, a right to this prejudice; but...you will probably not be able to impose it on women who wish to build bridges.[25]

Eliot, said Thomas, might as well have told women educators to invent "new symphonies and operas, a new Beethoven and Wagner, new statues and pictures...It would be easier to do all this than to create for women...a new intellectual heavens and earth."[26]

A second argument was that women would not be able to endure the strain of higher learning. As one historian noted: "Women were thought to be frail...overstudy would surely give them brain fever! And should they manage to survive college, their children would be sickly, if they were able to have children at all."[27] One retired Harvard Medical School Professor, Dr. Edward Clarke, published a treatise in 1873 entitled *Sex in Education*. After observing several students at women's colleges, he wrote that if women used their "limited energy" on studying, they would endanger their "female apparatus."[28] He believed that a young woman could not undertake college studies and "retain uninjured health and a future secure from neuralgia, uterine disease, hysteria, and other derangements of the nervous system." Clarke's arguments seemed not only to offer scientific validity to the prejudices of the day, but also to affirm that women ought to preserve their childbearing capacities for the good of society.[29]

Finally, some argued that college education for women would reduce the number of marriages and the size of families.[30] Once again, opponents of women's higher education claimed that the reduction in the size of families would be deleterious to society. According to one historian in the latter half of the 19th century: "Most of the opposition was less concerned with whether education was good for women than whether educated women were acceptable to men."[31]

In spite of the opposition of vocal critics, there was growing societal support for the institutions in other spheres. Matthew Vassar, the founder of Vassar College, noted that "[his] project had received the warmest commendations of many prominent literary men and practical educators as well as the universal approval of the public press."[32]

Expansion: 1920–1950

Between 1920 and 1950, women's colleges diversified and expanded. Several four-year colleges, considered innovative for their time, were founded, including Bennington College in Vermont, Sarah Lawrence College in New York, and Scripps College in California. These schools were influenced by the Progressive education movement, which emphasized student-centered learning. Patricia Palmieri, a historian focusing on women in American higher education, observed that the movement "put great priority on creativity and independence in the classroom. Art and music were considered as intellectually important as the humanities, social sciences, and the physical and biological sciences."[33] During this period, two-year women's junior colleges with vocational missions were founded. The twenties and thirties also saw the founding of new Catholic women's colleges. By World War II there was a wide variety of women's colleges, including four-year colleges and universities, professional and normal schools, teachers' colleges, and two-year institutions.[34]

Three main types of American women's colleges have evolved since the late 1800s: independent private colleges, including the "Seven Sisters"; Catholic colleges; and public colleges.

Private Women's Colleges

The Seven Sisters. The "Seven Sisters" was the name given to Barnard, Smith, Mount Holyoke, Vassar, Bryn Mawr, Wellesley, and Radcliffe, because of their parallel to the Ivy League men's colleges. The founding of the Seven Sisters, spanning a period of 24 years, had special significance for women's higher education. While about 50 women's colleges had been founded between approximately 1836 and 1875, most were unable to develop financial or organizational resources, or academic programs of high quality. As one historian has observed: "Generally, these colleges offered courses of study above the standard of those given at female seminaries but below those of colleges for men."[35] Vassar's opening in 1865, however, signified a new era because of its unprecedented high admissions standards and academic programs that "compared favorably with men's colleges." Smith, founded in 1875, offered a course of study even more closely paralleling that of men's colleges, and Wellesley, Bryn Mawr, and Mount Holyoke met similar standards.[36]

Another notable feature of the Seven Sisters was their ability to recruit and maintain a high percentage of women faculty. Talented women academics, excluded from jobs at men's colleges or coeducational institutions, made colleges such as Smith, Wellesley, and Mount Holyoke their professional homes.[37] Every president of Wellesley has been a woman. Faculty women at Wellesley have always enjoyed academic and administrative powers. One early professor, Vida Dutton Scudder, wrote of the satisfaction of these early female professors experienced in gaining access to a faculty:

> Yes! It is delightful...for a woman...to belong to a college faculty...Best of all, there is the sense of intellectual fellowship...What pleasure not only to follow a private line of study or research...but to listen to others when they come back from their summers or sabbaticals...The life of the faculty among its own members is fascinating in variety

> and stimulus. Probably it is especially fascinating to women, to whom this sort of group activity is comparatively new.[38]

Two of the Seven Sisters—Barnard and Radcliffe Colleges—were founded as coordinate colleges allied with Columbia and Harvard, respectively. Barnard College (named for Columbia's tenth President, A.P. Frederick Barnard), was organized and a provisional charter was granted to 22 initial faculty members in 1889. Barnard's staff included regular Columbia professors and others approved by Columbia's president. In 1890, Barnard was included in the educational system of Columbia but retained its own trustees, faculty, dean, and endowment.[39]

Radcliffe College emerged in 1893 from an annex to Harvard College called the "Society for the Instruction of Collegiate Women," in existence since 1878 at the request of a handful of prominent Cambridge families who sought educational opportunities for their daughters. Initially, a handful of Harvard professors agreed to separately teach women the same course of study given to Harvard students. In the 1890s, Radcliffe developed its own residential life and "a strong institution separate from, yet drawing on, Harvard."[40] This relationship—adjacent yet separate—continued until the 1970s, when the two colleges merged and women were officially granted Harvard degrees. (Radcliffe retains its own administration and special programs for women, however.)

Historian Helen L. Horowitz notes that the Seven Sisters did not develop in "an ad-hoc, pragmatic way. In each case, founders shaped their creations with a critical level of conscious intention and design." In turn, the Seven Sisters became the models for other independent women's colleges. "Daughter seminaries" of Mount Holyoke became Wheaton College in Norton, Massachusetts; Elmira College in Elmira, New York; Mills College in Oakland, California, and Rockford College in Rockford, Illinois. Sarah Lawrence College (Bronxville, New York), Bennington College (Bennington, Vermont), and Scripps College (Claremont, California) shared the same philosophies of the Seven Sisters, and like them, had benefactors who affirmed the need for a broader education for women. The Progressive-era founders of these colleges borrowed ideas from the preceding founders of the Seven Sisters.[41]

Southern Women's Colleges. In order to understand how private women's colleges developed in the South after 1875, it is necessary to consider the multitude of seminaries that preceded them, founded during the pre-Civil War period. The development of these institutions was clearly influenced by several societal factors: a belief in separate spheres for men and women; the influence of religious evangelism; and a need for white women to learn the classics for the sake of status.[42]

The tradition of separate social spheres for men and women during the 1800s was, as noted earlier, prevalent throughout America, but it was particularly strong in the South, where it became the operating force behind the development of separate colleges for women.

The Second Great Awakening of religious evangelism so prevalent in the North in the 1790s spread to the South in the early 1800s. Evangelical Protestantism not only attracted women as churchgoers, forming predominantly female congregations, but contributed to an ideal for women of piety and femininity.[43] Founders of Southern women's colleges were members of prevailing Protestant denominations, such as Methodist (Wesleyan), and Baptist (Georgia Baptist Female Seminary). However, other denominations also founded colleges. The

Moravians, for example, founded Salem College in North Carolina, and the Presbyterians founded Agnes Scott College in Georgia.

This Protestant influence intersected with the need for education to bolster and confirm social status. Christie Farnham, a historian who has researched the pre-Civil War Southern female seminaries, wrote that these schools were more about "gentility than utility." Nevertheless, the belief that a liberal arts education was a *sine qua non* for gentility for both sexes was strong in the South. Increasingly, families wanted college education for their daughters to improve their status for marriage.[44] A college education signified a woman's upper-class status. There was demand for young women to know Greek and Latin to read the Bible and better understand Western civilization.[45]

In response to this demand, the number of female seminaries grew. In contrast to the previous emphasis on educating upper-class young women, the late 19th-century Southern women's colleges were more accessible to the middle class. According to historian Patricia Palmieri, "It is difficult to say for sure what was a seminary and what was a genuine college...what is clear is that by the late 1800's, white, middle-class women had opportunities to attend seminaries and receive more than a decorous education."[46]

The southern colleges were different in tone from those in the North. In the South, there was little question of women entering any occupation at all, teaching or otherwise. In the North, women's colleges were an implicit threat to sex segregation in the workplace. Yet in the South, at the earliest colleges for women, whether liberal arts or religious, it was understood that graduates would not enter the work force.[47]

Southern private colleges for women often lacked "the students, the faculties and the facilities of their northern counterparts," writes Amy Thompson McCandless, a specialist on women's education in the South. In fact, as late as 1903, only Randolph-Macon Woman's College in Lynchburg, Virginia and Goucher College (then called the Woman's College of Baltimore) offered four years of college work.[48] But by 1920, several other independent women's colleges had been founded—Sweet Briar College in Virginia, Hood College in Maryland, and Agnes Scott College in Georgia.

Only one southern institution for women at the turn of the century possessed a large endowment—the H. Sophie Newcomb Memorial College for Women in New Orleans. While Newcomb was founded in 1886 as a coordinate college of Tulane University following the pattern of Radcliffe and Harvard, its administrators separated the colleges as much as possible in order to maintain both a "distinct woman's culture" and Newcomb's generous endowment.[49] Following the intent of the founder, Josephine Louise Newcomb, that the college curriculum offer both practical and liberal arts courses, students there could enroll in "classical, literary, scientific, and industrial subjects."[50]

Elizabeth Avery Colton, a professor at Meredith College, took an active role in raising awareness about the quality of women's colleges in the South. Administrators, aware of the fact that many of the women's colleges were having difficulty maintaining academic standards and facilities, organized the Southern Association of College Women (SACW) in 1903 in order to address these institutional problems. One of the Association's first goals was to "determine the type and quality of education available at southern colleges for women."[51] Between 1910 and 1917, Colton herself investigated 142 institutions of higher education for

women in the South. She found that these "colleges" were taking on non-academic goals; she said that they were over-burdened in trying to be "preparatory schools, finishing schools, and colleges." Colton's objectives in publishing her report were to encourage women's colleges to improve their standards.[52]

The efforts of Colton and other reformers brought about improvements in Southern women's higher education between 1890 and 1920. In part, these improvements were due to the advances in elementary and secondary education in the region.[53] Even as women's colleges in the South developed after 1920, the traditional image of southern womanhood and the accompanying stereotypes of race, class, and gender continued to be pervasive, affecting both black and white women's academic and professional choices.[54]

Southern Black Women's Colleges. While the majority of educational opportunities in the South were for whites, after the Civil War, education was viewed as the key to the emancipation of southern blacks and the status of blacks in the North.[55]

Intrinsic to the higher education of black women in its early years was the idea that it would provide these women with economic and social opportunities. During the 19th century, black education was not rigidly divided along gender lines, and the majority of black women were educated in coeducational institutions. Congress passed a Second Morrill Act in 1890 which required states with dual systems of higher education (all-white and non-white) to provide land-grant institutions for both systems. The intent was to provide for the establishment of black land-grant colleges and universities in those states with dual systems of higher education.[56]

Southern women's colleges were attended almost exclusively by white women. However, a handful of black women's colleges appeared in the post-Civil War years that also made strong educational contributions. Two women's colleges (now coeducational), were founded in this period: Barber-Scotia in Concord, North Carolina in 1867, and Huston-Tillotson in Austin, Texas, founded in 1876.

Bennett College, founded in 1873 in Greensboro, North Carolina, was originally a co-ed institution. In 1926 Bennett was converted into a liberal arts college for black women. In Atlanta, Georgia in 1881, Sophie B. Packard and Harriet Giles, two "white women of abolitionist tradition," founded Spelman College. Among black educators at the turn of the century, there was a debate as to whether blacks should pursue vocational education or liberal arts education. Booker T. Washington encouraged the development of vocational skills for blacks that would give them marketable skills in industry, while W.E.B. DuBois maintained that blacks should continue to acquire liberal arts degrees. Following Washington's philosophy, during the 1920s, both Bennett and Spelman developed vocational programs for women in the form of a home economics curriculum in addition to their liberal arts programs.

Catholic Women's Colleges

In addition to the Seven Sisters, Southern and other independent women's colleges, Catholic women's colleges were also founded to respond to women's educational needs.

Catholic colleges for men emerged in the late 18th century (for example, Georgetown University, founded in 1789). However, by the turn of the 20th century, there were still relatively few colleges for Catholic women, while "increasing numbers of upper-and upper-middle class Catholic families could afford college for daughters as well as sons, and each year more young Catholic women enrolled in secular colleges and universities." During the early 1900s, leaders in the Church increasingly realized that young middle-class Catholic women needed access to Catholic higher education.[57]

There was also a need for the higher education of women within the Church. Nuns sought to obtain teaching certification, but it was difficult for them to pursue the requisite college degrees and certification outside the convent. "Mothers superior saw that having a community-owned college would be one answer to the ongoing problem and pursued founding a college where possible."[58]

The first four-year Catholic college for women in the United States was the College of Notre Dame of Maryland, which granted its first degrees in 1899. Four more were founded by 1905; 14 in the decade after 1905; 37 between 1915 and 1925; and 19 between 1925 and 1930. In 1955, there were 116 Catholic colleges for women.[59] Catholic women's colleges achieved academic distinction, and continue to enjoy national reputations. Among them are Trinity College in Washington, D.C.; St. Mary's College in Notre Dame, Indiana; and the College of St. Catherine in St. Paul, Minnesota.[60] These colleges not only offered solid liberal arts curricula of Latin and Greek, modern language, philosophy, English, and history to undergraduates; over time, they offered graduate work as well.

Catholic higher education for women had several purposes. According to Patricia Palmieri, "Moral character was stressed, as well as intellectual development. Service was also expected."[61] Curricula of Catholic women's colleges often stressed pragmatic skills and trades; Palmieri writes:

> In 1931, Marygrove College, in Detroit, stated that one of its principles behind the liberal arts was the 'art of making a living.' Every graduate at Marygrove was to be provided with the means for self-support. The occupations which the college considered appropriate for women included college or high school teaching, social work, banking, secretarial work, journalism, library work, music, and being a successful wife and mother in an ideal Catholic home.[62]

She further notes that because women who attended these early Catholic women's colleges were from working-class backgrounds, "these colleges promoted careers as a source of mobility for their clientele."[63]

There were schools founded between 1918 and 1945 that had difficulty maintaining academic resources, particularly with regard to their faculties and financial status. One reason that these did not flourish and subsequently closed their doors is that these were years of transition for women in public arenas, including higher education, and much of the church leadership was still ambivalent about the higher education of young Catholic women. As historian George C. Stewart, Jr. wrote, "Many bishops clung tenaciously to 19th-century views and only acquiesced in women's colleges in order to offset the perceived evils of Catholic girls attending secular colleges."[64] As a consequence, Stewart observes, bishops "provided the colleges little financial support and reserved highly qualified priest-professors for seminaries and men's colleges."[65] Families did not universally support their daughters' higher education, either: "A

large segment of lower-middle-class Catholics was not far removed from immigrant roots with no tradition for higher education, especially for women."[66] In addition, there were faculty who were inadequately educated. "It was not unusual to find among the faculty teachers who themselves had never had the opportunity to attend a college and it was, in fact, extraordinary to find faculty members who had attended any college other than the one in which they were teaching."[67]

In spite of some of these difficulties, there is evidence that the colleges did provide an adequate liberal arts education. As one historian observed: "Catholic colleges for women, however, with whatever weaknesses they may have perpetuated in faculty standards, probably came closer to approaching the primary aim of liberal education than did the early Catholic colleges for men. It would be difficult to maintain that they always accepted a clearly defined intellectual objective, but they were certainly not preparatory seminaries as most of the earlier colleges for men had been."[68] Catholic women's colleges today affirm their missions of providing a liberal arts education within their religious framework.

Public Institutions

Private colleges continue to make up the majority of women's colleges. However, public institutions are an important, if small part of the history of women's colleges.

State-supported higher education for women was at its height around the turn of the century. Following the founding of the Mississippi Industrial Institute and College (II&C) in 1884, other state legislatures followed Mississippi's lead, establishing Georgia State College for Women (1889), North Carolina College for Women (1891), Alabama College (1893), Texas State College for Women (1901), Florida State College for Women (1905), and Oklahoma College for Women (1908).[69]

Today, there are only three publicly funded women's colleges operating in the United States, under varying administrative arrangements: Mississippi State University for Women, Douglass College of Rutgers University, and Texas Woman's University.

Mississippi State University for Women was America's first public college for women, opening its doors in 1884 (its original name was the Industrial Institute and College). The campaign for a state-supported college for women was begun by Sallie Eola Reneau, a graduate of the Holly Springs Female Institute. She envisioned a women's institution that would be the academic equivalent of the University of Mississippi, which excluded women from the time of its opening in 1848 until 1882. Though the state legislature approved one of her proposals in 1856, it did not appropriate any funds.[70] She distanced herself from the manifestos of the more radical feminists of her era, emphasizing instead the universal advantages of the college she sought to create. Addressing herself to the legislature, she stated: "...the indigent as well as the opulent may receive from this institution the imperishable riches of a well-cultivated mind."[71]

Sallie Reneau did not live to see the realization of her plans; she died in 1878 and the legislature did not act until the early 1880s. Legislator John McCaleb Martin of Claiborne County drafted a bill to "create a state school which would provide women in Mississippi with three alternatives: arts and sciences education, industrial training, and teacher training. This bill would create a unique hybrid: part liberal arts college, part vocational school, and

part "normal" or teacher training school."[72] The measure was finally approved by a slim margin in the state legislature, and the school was established at Columbus.

A century later in 1982, the Supreme Court ordered the school to admit a male nursing student. At present, male students may attend, but the university affirms its primary mission as the education of women. In 1988, the board affirmed the mission of Mississippi University for Women as an institution of quality academic programs for all qualified students, with an emphasis on distinctive opportunities for women.

Douglass College was founded in 1918 as the New Jersey College for Women. The founder, Mabel Smith Douglass, "wanted to create a college which would expand the educational opportunities in higher learning beyond the realm of traditional careers for women."[73] Today, Douglass College has approximately 3,350 women students, and is an operational part of Rutgers University. Like Rutgers, Douglass continues to be publicly funded. Women enrolled there, however, also take classes at the various colleges which compose Rutgers, so Douglass could be described as a residential entity that provides a variety of support services and programs specifically for women.

Texas Woman's University in Denton, Texas was established by the Texas Legislature in 1901. Vocational training for the state's women was a central concern of the university's founders; in 1889, the State Grange and Patrons of Husbandry asked the legislature: "Do girls not need an industrial college, too, where they can receive a practical education which will prepare them for some vocation in life, in order that they may not work in the cotton fields from necessity."[74] Initially called the College of Industrial Arts, the new university offered courses in music, home economics, and vocational subjects, which made it a trainer of teachers in those areas.

Today, Texas Woman's University has about 100 major fields of study, and special colleges of arts and sciences, education and human ecology, health sciences, nursing, occupational therapy, and physical therapy. Ninety percent of its students are Texas residents. Though some men are enrolled in health sciences and graduate studies, and a few are undergraduates, the school affirms its primary mission for women.

Graduates 1879–1960

Early Graduates

The first women's college graduates entered a world that was in the midst of the Progressive Era, with its social activism and concern for social betterment. As one historian observed:

> Because middle-class students were associated with teaching and reform, the separate women's colleges upheld the norms of social service for their students. Studies of the careers of the first graduates of the Seven Sisters demonstrate that this generation was instrumental in establishing the agenda of social reform for the Progressive movement in the United States.[75]

Around the turn of the century, young, and mostly single college graduates founded "settlement houses" in big cities. Settlement houses were laboratories of social experimentation where these young progressives resided and sought to ameliorate deterioration and poverty in urban centers: crime, poor working conditions, and housing.

Providing reading rooms, nurseries, and a variety of services to inner-city residents, settlement houses like Hull House in Chicago were a hallmark of turn-of-the-century Progressivism.[76]

Three women's college graduates of the Progressive Era who typified this increased participation in social causes were Jane Addams, Sophonisba Breckinridge, and Julia Lathrop. Jane Addams graduated from Rockford College in 1881 and opened the social settlement of Hull House in Chicago in 1889. She eventually became the President of the Woman's International League for Peace, and in 1931 won a Nobel Peace Prize. Sophonisba Breckinridge, a social worker and educator, received her B.S. from Wellesley College in 1881, and went on to earn both a law degree and Ph.D. from the University of Chicago, where she later was a member of the faculty. She was a resident of Hull House in Chicago, and served as vice president of the National American Woman's Suffrage Association and served as president of various social workers' organizations. Julia Lathrop spent two years studying at Rockford College before receiving her B.A. from Vassar College in 1880. She too was a resident of Hull House, and was involved in issues such as juvenile court laws and the care of the mentally disabled. She served as Chief of the Children's Bureau at the U.S. Department of Labor.[77]

However, not every early graduate chose activism: following the "expected social role," graduates also devoted their post-college life to domesticity.[78] Graduates of women's colleges followed the trends that American women college graduates followed generally. For instance, another observer noted that after 1920, "interest in [college women's] social service and political action peaked significantly, reflecting a concomitant decline in Progressive social reform. A new trend of positive identification with marriage and maternity came to characterize women students."[79] Further, "whereas approximately half the graduates of women's colleges remained single before 1920, after that time college women preferred to become wives and mothers, generally eschewing the career path....during the period 1920-1960, college-educated women married earlier, bore larger families, and turned their attention wholeheartedly to childrearing..."[80] However, not all graduates of women's colleges could afford not to work. Certain graduates in these early years did go beyond the expectations that they become schoolteachers and became professors, lawyers, and physicians—rare choices for the era.

During the 1930s, the Great Depression limited the job opportunities for women's college graduates: "... One of the side-effects of the thirties was to sideline thousands of intelligent and well-educated women into a lifetime of unpaid volunteer activities."[81] There was a shortage of good jobs, and "it was extradorinarily difficult for even the most ambitious to buck the pervasive American feeling that a woman should not 'take a job away' from a qualified man." Women directed their energies toward volunteerism in hospitals, politics, social and family service agencies, and museums and cultural centers It is interesting to note that women's attainment of doctoral degrees was relatively high during the 1920s: the *Digest of Education Statistics* reports that in the year 1919-20, the percentage of doctoral recipients who were female was 15 percent; by the end of the decade, in the year 1929-30, that number was still 15 percent.[82]

While educators directed alumnae of women's colleges into graduate professional schools during the Depression, and these women did succeed in finding paid jobs, they were often jobs for which the women were overqualified.[83]

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The war years, 1941 to 1945, provided women with interesting career and post-graduate alternatives: "...from 1941 to 1945 women had a better chance of entering the professional schools than they would until the 1970s." While young men were fighting or organizing the war, women took advantage of the gap and successfully entered fields such as law, medicine, architecture, science, and government. Women also entered a range of working class jobs in the war production effort. Yet, by 1946, it was more difficult for women to gain entrance to graduate school. Also, for women's college graduates, "if launching a career during wartime was simple, getting ahead afterwards was not," as men returned from the war and re-entered the work force, and the pressure for women to settle into domesticity grew.[84]

Post-World War II Graduates

The years between the end of World War II and 1960 were times of ambiguity for graduates of women's colleges. While the dominant social pressure was for female college graduates to return to the home and domesticity, women's colleges attempted to stand by their institutional missions regarding equality of educational opportunity.[85] Maternity and child care were viewed as women's social destiny; however, according to Palmieri, "the Seven Sisters continued to resist attempts to add home economics to their curriculum and continued to inspire some women to go on to graduate school."[86]

Women's college graduates in the 20th century have distinguished themselves in the world of work. Researchers have examined some achievement and educational attainment data to see whether graduates of women's colleges have achieved professionally out of proportion to their numbers. Elizabeth Tidball's research in particular suggests that women's college graduates have notable attainments. For instance, in 1980 Tidball sampled 1,500 women from three editions of *Who's Who in American Women*; sixty percent of this sample obtained their B.A. degrees between 1910 and 1940. Of those with B.A.'s, Tidball found that graduates of women's colleges were about twice as likely to be cited for their career accomplishments as were women graduates of coeducational colleges. This held true even after separate ratios were calculated for institutions of similar size and selectivity.[87]

Tidball's 1980 research also analyzed the National Academy of Sciences' Doctorate Record File (DRF), looking at women who had received doctorates between 1920 and 1973. Tidball again concluded that graduates of women's colleges were twice as likely to have obtained doctorates across all fields as were women graduates of coeducational colleges. In a separate study, she also found that graduates of women's colleges were twice as likely to enter medical school than women graduates of coeducational schools.[88] While suggestive, these studies do not take student background characteristics into account, hence, we cannot be sure whether the colleges or the pre-existing characteristics of the women admitted to them are responsible for the higher rates of success after college.

Conclusion

In summary, the nation's women's colleges during this period provided women both liberal arts and practical training, enabling some graduates to establish careers, pursue social service and activism, and sometimes to combine one or both of these with the more common role of homemaker. It seems clear that the 20th century women's colleges in some ways exceeded

their mission and went beyond the expectations of their founders' original visions of merely attaining access to higher education.

Beginning in the 1960s, the conversation was not simply about women's colleges, but about the nature of women's participation overall in higher education. The next chapter provides an overview of the issues that have impacted women's colleges over the last several decades.

Notes

1. Joyce Antler, "Culture, Service and Work: Changing Ideals of Higher Education for Women," in *The Undergraduate Woman: Issues in Educational Equity.* Pamela J. Perun (ed). Lexington, MA: DC Heath and Co., 1982, p. 16.
2. Elaine Kendall, *Peculiar Institutions.* New York: G.P. Putnam's Sons, 1975, p. 9.
3. Louise Schutz Boas, *Women's Education Begins.* Norton, Massachusetts: Wheaton College Press, 1935, p.89.
4. Thomas Woody, *A History of Women's Education in the United States.* Volume 4, Book 2. New York: The Science Press, 1929, p. 143.
5. Catharine Beecher from *True Remedy*, cited in Woody, A *History of Women's Education in the United States.*
6. Woody, A *History of Women's Education in the United States*, pp. 143–44.
7. Woody, *A History of Women's Education in the United States*, p. 144.
8. Helen Lefkowitz Horowitz, *Alma Mater: Design and Experience in the Women's Colleges from their Nineteenth Century Beginnings to the 1930s.* New York: Alfred A. Knopf, 1984, p. 17.
9. Helen Lefkowitz Horowitz, *Alma Mater,* p 17.
10. Christie Anne Farnham, *The Education of the Southern Belle: Higher Education and Student Socialization in the Antebellum South.* New York: New York University Press, 1994, p. 16.
11. Antler, "Culture, Service and Work: Changing Ideals of Higher Education for Women," p. 17
12. Antler, "Culture, Service and Work: Changing Ideals of Higher Education for Women," p. 16.
13. Farnham, *The Education of the Southern Belle*, p. 61.
14. Mabel Newcomer, *A Century of Higher Education for American Women.* New York: Harper and Brothers, 1959, p. 16.
15. Newcomer, *A Century of Higher Education for American Women*, p. 16.
16. Antler, "Culture, Service and Work: Changing Ideals of Higher Education for Women," p. 17
17. Newcomer, *A Century of Higher Education for American Women*, p. 17.
18. Boas, *Woman's Education Begins*, p. 217.
19. Woody, *A History of Women's Education in the United States*, p. 184.

20. Woody, *A History of Women's Education in the United States*, p. 187.

21. Woody, *A History of Women's Education in the United States*, p. 149.

22. Helen Lefkowitz Horowitz, *The Power and Passion of M. Carey Thomas.* New York: Alfred A. Knopf, 1994.

23. Boas, *Women's Education Begins*, p. 48.

24. Helen Lefkowitz Horowitz, "The 'Hateful' Wellesley Inaugural Address," *Wellesley.* Winter 1995, p. 31.

25. Thomas, M. Carey, "Should Higher Education for Women Differ?" Reprinted in *The American Reader: Words that Moved a Nation*, ed. Diane S. Ravitch. New York: HarperCollins Publishers, 1990, p. 208.

26. M. Carey Thomas cited in *The American Reader*, ed. Diane S. Ravitch, p. 208.

27. Newcomer, *A Century of Higher Education for American Women*, p. 28.

28. Clarke cited in Barbara Miller Solomon, *In the Company of Educated Women: A History of Women and Higher Education in America.* New Haven, CT: Yale University Press, 1985, p. 56.

29. Solomon, *In the Company of Educated Women*, p. 56.

30. Newcomer, *A Century of Higher Education for American Women*, p. 30.

31. Newcomer, *A Century of Higher Education for American Women*, p. 31.

32. Woody, *A History of Women's Education in the United States*, p. 148.

33. Patricia Palmieri, "Women's Colleges", in *Women in Academe: Progress and Prospects.* Mariam K. Chamberlain (ed). New York: Russell Sage Foundation, 1988, p. 113.

34. According to the *Education Directory*, put out by the United States Office of Education from the late 1800s to the early 1960s, there were an estimated 270 women's colleges in 1935, 276 in 1945, 248 in 1955, and 252 in 1960. However, comparisons of education statistics from the early to mid-1900s can be misleading due to different collection methods, problems in estimating for nonresponse, and the lack of resources available to collect this information compared to today. For more information on data collection problems throughout the history of collection of data on education, see *120 Years of American Education: A Statistical Portrait* by the U.S. Department of Education, National Center for Education Statistics.

35. Antler, "Culture, Service and Work: Changing Ideals of Higher Education for Women," p. 16

36. Antler, "Culture, Service and Work: Changing Ideals of Higher Education for Women," p. 16

37. Lynn Gordon, "From Seminary to University", *Gender and Higher Education in the Progressive Era.* New Haven: Yale University Press, 1990, p. 28.

38. Vida Dutton Scudder, excerpted from "A Pedagogic Sunset," in Patricia Palmieri, In *Adamless Eden: The Community of Faculty Women at Wellesley.* New Haven, CT: Yale University Press, 1995.

39. *Barnard College 1994–95 Catalogue*, p. 10.

40. Horowitz, *Alma Mater*, p. 104.

41. Horowitz, *Alma Mater*, pp. 328–350.

42. Farnham, *The Education of the Southern Belle*, p. 29.

43. Farnham, *The Education of the Southern Belle*, p. 29.

44. Farnham, *The Education of the Southern Belle*, p. 69.

45. Farnham, *The Education of the Southern Belle*, p. 31.

46. Palmieri, "Women's Colleges," p. 111.

47. Farnham, *The Education of the Southern Belle*, p. 31.

48. Amy Thompson McCandless, "Progressivism and the Higher Education of Southern Women," *North Carolina Historical Review.* Vol. LXX, No. 3, July 1993, p. 317.

49. McCandless, "Progressivism and the Higher Education of Southern Women," p. 314.

50. McCandless, "Progressivism and the Higher Education of Southern Women," p. 314.

51. McCandless, "Progressivism and the Higher Education of Southern Women," p. 320.

52. Colton cited in McCandless, "Progressivism and the Higher Education of Southern Women," p. 321.

53. McCandless, "Progressivism and the Higher Education of Southern Women," p. 322

54. McCandless, "Progressivism and the Higher Education of Southern Women," p. 323

55. The information in the section on black women's colleges is largely drawn from Palmieri, "Women's Colleges."

56. U. S. Department of Education, *Historically Black Colleges and Universities, 1976–90.* Washington, D.C.: Government Printing Office, July 1992, p. 2.

57. George C. Stewart, Jr., *Marvels of Charity: History of American Sisters and Nuns.* Huntington, Indiana: Our Sunday Visitor Publishing Division, 1994, p. 328. .

58. Stewart, *Marvels of Charity*, p. 380.

59. Mary J. Oates (ed), *Higher Education for Catholic Women: An Historical Anthology.* New York: Garland Publishing Inc., 1987, p. 121.

60. Stewart, *Marvels of Charity*, p. 380.

61. Palmieri, "Women's Colleges," p. 113.

62. Palmieri, "Women's Colleges," p. 113.

63. Palmieri, "Women's Colleges," p. 113.

64. Stewart, *Marvels of Charity, p.* 381.

65. Stewart, *Marvels of Charity, p.* 381.

66. Stewart, *Marvels of Charity, p.* 382.

67. Oates, *Higher Education for Catholic Women: An Historical Anthology*, p. 183

68. *Oates, Higher Education for Catholic Women: An Historical Anthology*, p. 196.

69. Bridget Smith Pieschel and Stephen Robert Pieschel, *Loyal Daughters: One Hundred Years at Mississippi University for Women.* Oxford, Mississippi: University of Mississippi Press, 1984, p. 8.

70. Pieschel and Pieschel, *Loyal Daughters: One Hundred Years at Mississippi University for Women*, p. 4.

71. Pieschel and Pieschel, *Loyal Daughters: One Hundred Years at Mississippi University for Women*, p. 4.

72. Pieschel and Pieschel, *Loyal Daughters: One Hundred Years at Mississippi University for Women, P. 5.*

73. Douglass College, historical materials.

74. Joyce Thompson, *Marking a Trail: A History of the Texas Woman's University.* Denton, Texas: Texas Woman's University Press, 1982, p. 1.

75. Palmieri, "Women's Colleges," p. 110.

76. The Great Republic: A History of the American People (3rd edition). Lexington, Massachusetts: D.C. Heath and Co., 1985, pp. 598–603.

77. The A.N. Marquis Company, *Who Was Who in America.* Chicago: The A.N. Marquis Company. 1966, Vol. 1, pp. 9 and 707; Vol. 3, p. 78.

78. Palmieri, "Women's Colleges," p. 110.

79. Antler, "Culture, Service and Work: Changing Ideals of Higher Education for Women," p. 29.

80. Antler, "Culture, Service and Work: Changing Ideals of Higher Education for Women," p. 29.

81. Kendall, *Peculiar Institutions*, p. 193.

82. U.S. Department of Education, *Digest of Education Statistics.* Washington, D.C.: Government Printing Office, 1995, p, 236.

83. Kendall, *Peculiar Institutions*, p. 193.

84. Kendall, *Peculiar Institutions*, pp. 204–205.

85. Palmieri, "Women's Colleges," p. 114.

86. Palmieri, "Women's Colleges," p. 114.

87. U.S. Department of Education. *Single-Sex Schooling: Perspectives from Practice and Research, Volume* 1. Washington, D.C. Office of Educational Research and Improvement, December 1993, p. 60.

88. U.S. Department of Education, *Single-Sex Schooling: Perspectives from Practice and Research*, pp. 60–61.

Chapter 2:

Women's Colleges in the United States, Recent Issues and Challenges

Introduction

The story of women's colleges between the 1960s and early 1990s can only be told in the context of the larger picture, the social and legal advances made by women during that time. Changing attitudes toward the role of women in American society created new opportunities, as well as new challenges, for women of all walks of life.

Women's colleges began to drop in numbers during the late 1960s and early 1970s. Societal and legal changes led to financial problems for women's colleges. In response, some women's colleges became coeducational, while others merged with other institutions, and still others were forced to close their doors. Those that survived saw a resurgence of interest among American women of all backgrounds and ages. As Mariam Chamberlain, Director of the Task Force on Women in Higher Education, pointed out: "...individual women's colleges are characterized by a great vitality. This strength is apparent in their capacity to sustain a female tradition of intellectual excellence, in their promotion of women as scholars, and in their focus on a healthy educational climate for women."[1]

In contrast to the history told in chapter 1, women today actually have more collegiate options than men.[2] There are only about 10 men's colleges left in the United States today, but over 80 women's colleges survived the last three decades, during which they were challenged by rising numbers of coeducational institutions. These women's colleges are continually reevaluating and strengthening their institutional missions in order to best serve the women they currently enroll.

The Effects of Societal Changes on American Women

The Early Post-War Era

The history of American women in the second half of the 20th century is far too complex to be covered completely in just a few paragraphs, but a brief discussion is vital to describing what happened to women's colleges during those decades. Paramount to understanding American women during this period, is a knowledge of the women's movement and feminism. Understanding how these and other social forces originated and shaped their times is necessary in order to set the stage for discussion of women in higher education and the fate of women's colleges during the post-World War II era.

The liberation of women from traditional roles is usually associated with the 1960s. But events during the 1940s and 1950s were pivotal to the origins of women's liberation. During that period, numbers of women were slowly rising in areas such as government and academia. As one historian wrote of women in politics during that time: "In the 1940s and 1950s, 34

women were elected to the House of Representatives. There were still a large number of Congressmen's widows elected—13 of the 34—but more qualified women made it on their own, and a number were to make the House their career."[3] Notable women in government included Margaret Chase Smith, the Senator from Maine; Frances Perkins, the Secretary of Labor; and Oveta Culp Hobby, the Secretary of Health, Education, and Welfare.[4]

During World War II, American institutions of higher education experienced depleted male enrollments and reduced numbers of male faculty. This provided unanticipated opportunities for women as students and professors in higher education. In both coeducational institutions and at women's colleges, women were recruited into the traditionally male-dominated science fields. As one historian noted: "Clearly, the war-time crises, in stimulating plans for future admissions of women, also affirmed confidence in their abilities."[5]

Because women were recruited by some college graduate departments during World War II, women's colleges strengthened their undergraduate curricula to meet the requirements of previously rarely chosen fields of study. After veterans returned and men again filled graduate school slots, women's colleges remained a possible choice for women as a place to pursue knowledge in areas that had been traditionally male-dominated. For example, at Barnard College meteorology and electronics were introduced, and at Vassar College, 26 percent of the students majored in science in the early 1940s.[6]

The Women's Movement

Successful women in government and academia, however, were the exception, rather than the rule, in post-World War II America. Decades after a former suffragette movement had won the vote for American women, a modern women's movement began to take hold. This modern women's movement and feminism can be described in many different ways. For the sake of this report we shall borrow from Joyce Gelb and Marian Lief Palley in their book, *Women and Public Policies*, in which they define the women's movement and feminism as "a movement seeking to operationalize self-determination for women in political, economic, and social roles."[7] The philosophical foundations of modern feminism began to develop in 1952 with the American publication of Simone de Beauvoir's *The Second Sex* of which was written: "...the general tone was one of regret for women's limited opportunities for fulfillment as human beings and it looked forward to a time when men and women, without denying their differences, could function as true equals."[8]

Following *The Second Sex* was the popularity of Betty Friedan's *The Feminine Mystique*,[9] published in 1963. Friedan's work resonated with many American women who, contrary to the image of domesticity that was popular at the time, were working outside the home, as one historian found:

> ...by 1960, 40 percent of all women over sixteen were in the labor force compared with 25 percent in 1940. More important, most of the new workers were married and many had young children. By the end of the 1960s nearly 45 percent of all married women were employed compared with 15 percent in 1940, and the figure included

> more than half of all mothers with children aged six to seventeen. Ironically, the same women who were described in the *Ladies' Home Journal* and *McCall's* as thriving on housework were spending an increasing amount of their time in gainful employment.[10]

These increases of mothers in the workforce were attributed to an increasing need for two incomes due to the inflation and rising consumerism of the times.[11] According to one historian, the feminine mystique, or the conflict between the reality of these women's lives and the "image" of domesticity they were trying to obtain as described by Friedan, made the period between the end of World War II and 1960 a "retrogressive one for educated American women."[12] The conflict described by Friedan as the "problem that has no name" caused frustration in many women.[13] One cause for this unhappiness was the fact that when young mothers had completed their child bearing years, they still faced 20 to 30 years in which to carry out their personal missions. Friedan's work, according to one scholar, documented broadening awareness of women as they began to question whether or not their careers in homemaking were fulfilling.[14]

As Helen B. Shaffer documented in a *Congressional Quarterly* study on women and the early 1960s: "Friedan's book had a direct impact on the consciousness of women susceptible to its message. The birth control pill had promised a new freedom from unwanted childbirth and overpopulation was being regarded as the new menace....After Friedan came a stream of books carrying her arguments to new realms."[15] Other writers that discussed the liberation of women in various contexts included Sheila Tobias, Kate Millett, Germaine Greer, and Gloria Steinem.

Chapter 1 of this report discussed how the abolitionist movement impacted the early suffragette movement during the 19th century. In a similar fashion, the civil rights movement of the 1950s and 1960s was a catalyst for the modern women's movement. As one historian wrote:

> The civil rights movement both provided a dramatic example of the point which women activists were trying to communicate, and it provided a model of protest which helped bring a women's movement to life. It thereby gave women a profoundly political picture of their society and underlined the significance of sex consciousness as an organizing principle. Just as the *Brown* decision had crystalized the issue of protest for blacks, the civil rights movement illustrated with unmistakable clarity to women the possibility of people uniting on the basis of sex identity to preserve their dignity and secure equal treatment.[16]

Women began to mobilize to influence not only the creation of legislation, but also the implementation of public policy that would protect women's rights.

Women and The Law

Women's rights were a part of the political agenda of the 1960s, but getting governmental action on women's issues was a slow and arduous process. President John F. Kennedy created a Presidential Commission on the Status of Women in December, 1961. The Commission was a proposal of a female member of Kennedy's campaign staff, Esther Peterson (the head of the Women's Bureau at the Department of Labor, Kennedy's highest female appointee.) The

Commission's report, released in October, 1963, recommended the President issue an Executive Order on equal opportunity in employment. Earlier that year, the Equal Pay Act, which required that women be paid equally when doing the same job as men, was passed by Congress. This Act had been introduced into every Congress for decades.[17]

Women were included in Title VII of the Civil Rights Act of 1964, which was the equal employment section of the bill, partly as a strategy on the part of anti-civil rights legislators to kill the bill. The strategy backfired as the bill, surprisingly, passed with the amendment intact.[18] When the Equal Employment Opportunity Commission was established in 1965 to implement the Civil Rights Act of 1964, it refused to consider cases of economic discrimination against women. The frustration of women leaders fighting this discrimination led to the creation of the National Organization of Women (NOW), which became a leading organization and symbol of the women's movement.[19] Betty Friedan was elected NOW's first president in 1966.[20] Other groups that formed included The Women's Equity Action League, and National Women's Political Caucus.[21]

Support among women for some type of political organization on their behalf was high. While there was a certain discomfort with radical groups that formed during the late 1960s and early 1970s in the name of women's liberation, a Louis Harris poll in 1972 showed 71 percent of American women at the time believed "if women don't speak up for themselves and confront men on their real problems, nothing will be done."[22] However, a simply worded Equal Rights Amendment, proposed in order to make women's rights a part of the U.S. Constitution, easily passed Congress in 1972, but it met opposition in State legislatures and was never ratified.

While Federal laws were enacted during the 1960s and 1970s that led to the improvement of the financial status of American women, some changes in State laws, at about this same time, ended up having a negative effect on women. A *Time* magazine cover story on divorce and its negative impact on women and children contended that 1969 was a pivotal year, because it was when the first "no-fault" divorce law was enacted in California *Time* described this as the beginning of a national trend which led to rising divorce rates, requiring more women to support themselves and their children.[23] Indeed, a study on the effects of no-fault divorce found women and children to be hurt financially, as early as 1973: "Under no-fault divorce, if the state also operates under the common law regarding property rights—as many states do—the loss to the wife may be substantial.....Regarding the welfare of children.....no-fault divorce *increases* the risk that the interests of children will be overlooked because it may seem useless to struggle over custody if the divorce is to be granted on demand."[24]

It is clear that the increase in divorce over the past few decades have hurt American women financially and can be counted among the many causes of their rising numbers in the workforce. Women turned to higher education, not just for a liberal arts background that would make them knowledgeable wives and mothers as described in chapter 1, but also to prepare them for professions.

The Effects of Legislation on Higher Education

Early Post-War Legislation

Just as the changes in post-World War II American society propelled the women's movement, these changes also had an influence on higher education institutions and higher education legislation. Due to veterans enrolling in college, institutions of higher education began to expand rapidly to absorb these older students in the years immediately following World War II. The post-World War II "baby boom" eventually resulted in another influx of college students, beginning in the late-1960s, causing enormous pressure on all institutions of higher education. As increasing numbers of Americans desired access to higher education, legislation was passed broadening opportunities for Federal financial assistance.

In 1944, the U.S. Congress passed the Serviceman's Readjustment Act. Known as the "GI Bill," it provided assistance for the education of veterans.[25] As one historian noted, these veterans: "...changed the character of higher education and enhanced the larger public's respect for schooling."[26] Over 2,230,000 veterans, almost 65,000 of them women, would have their expenses paid to matriculate in college and graduate school.[27] The women veterans primarily went to public coeducational institutions, while ironically, women's colleges such as Vassar College, Finch College and Sarah Lawrence College began to enroll male veterans. By 1947 veterans were 49 percent of the total college enrollment, and 69 percent of college men were veterans.[28]

Legislation also affected the subjects students were encouraged to study. The development of manpower for economic prosperity and national defense was among the justifications for The National Science Foundation (NSF), established in 1950. Seven years after NSF was created, the Soviet Union sent up a satellite, "Sputnik", for space exploration. Competition with the Russians raised concern in America over educational issues, as Thomas Wolanin and Lawrence Gladieux quote a Congressional declaration: "The Congress hereby finds and declares that the security of the Nation requires the fullest development of the mental resources and technical skills of its young men and women."[29] The National Defense Education Act (NDEA) of 1958 was enacted in order to bolster science, mathematics, and foreign language instruction for all students. Among its many provisions were funds for higher education, particularly student loans and fellowships.[30]

Higher Education Legislation in the 1960s and 1970s

The Civil Rights Act of 1964 has had lasting effects on higher education, but these changes were slow in coming. Title VI of this law prohibited discrimination on the basis of race, color, and national origin. This would later lead to Executive Order 11246, September 1965, amended by Executive Order 11375, October 1967, which prohibited discrimination in employment under federal contracts.[31] Additional legislation included the Economic Opportunity Act of 1964, which authorized grants for college work-study programs.[32] This act made possible a broadening of the applicant pool and acceptance rate at all colleges for students from low-income families.

The Higher Education Act of 1965 (HEA), among its many provisions, authorized insured student loans, established a National Teacher Corps, provided grants for university community service programs and strengthened teacher training programs.[33] This law was amended in 1968 to authorize a variety of new programs including assistance to disadvantaged college students through special counseling and summer tutorial programs.[34] While previous public policy on higher education had focused on granting land, aiding specifically targeted groups, and encouraging specific fields of study, as Wolanin and Gladieux wrote: "the 1965 act is clearly distinguished by the breadth of programs it initiated and by the size of the federal commitment it represents.....The 1965 act stands as a landmark in the development of higher education as a federal policy arena and in defining the substantive scope of that arena."[35]

However, women did not see any immediate positive effects of this legislation. In *Women and Public Policies*, Gelb and Palley note:

> By the late 1960s women on American college and university campuses had begun to recognize the discrimination that they were suffering. Perhaps this awareness was wrought in part by ripple effects of the civil rights movement on potential women activists, by the emergence of an organized, albeit small, women's rights movement, by the wave of unmet rising expectations that had been fed by President Johnson's executive orders of 1965 and 1967, and by the various state meetings of commissions on the status of women.[36]

Representative Edith Green, a Democrat of Oregon, held hearings on discrimination against women in higher education in 1970, and subsequently introduced Title IX into the Education Amendments of 1972.[37] Title IX specifically prohibited sex bias in admission to vocational, professional, and graduate schools, and public institutions of undergraduate higher education.[38] Gelb and Palley note: "....in 1974 the Women's Educational Equity Act (WEEA) was enacted, providing funds for research and development to undergird women's efforts toward gaining equality in education. No real conflict arose in regard to WEEA in either the legislative or the administrative arena. But controversy began to rage in response to Title IX as soon as the implications surfaced."[39]

Title IX was controversial in its implications because of confusion over exactly what was covered by this statute. Title IX states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance...".[40] In their 1982 analysis of the early implementation problems that faced Title IX, Gelb and Palley wrote that the sports establishment of the time "lobbied to prevent what they saw as a potential erosion in their power if equal educational opportunity in athletics and organized sports in particular were provided to all students regardless of their sex."[41] For years, there were attempts to have college athletics made exempt from Title IX regulations. But, as Gelb and Palley concluded:

> ....despite efforts to stall enforcement of Title IX, especially regarding athletics, some substantial changes have taken place. Increasingly, women's sports are receiving additional institutional funding; scholarships are being made available to women athletes; more options in sports are open to women; and physical education classes are integrated.[42]

L. Leotus Morrison, in her analysis of women in college athletics, would later write that Title IX was probably "the most far-reaching influence contributing to the growth of women's sports...."[43] She presents data on higher education athletics to support her claim, showing that in 1971–72 only 15.6 percent of all college athletes were women and that this increased to 30 percent by 1980–1981.[44]

Title IX implementation battles would continue in the courts during the 1980s and 1990s. A 1984 ruling by the Supreme Court stated that Title IX covered only programs or activities funded with federal money.[45] In 1988, the Civil Rights Restoration Act ensured that Title IX applied to the entire institution, regardless of where federal funds were used.[46] While private, single-sex education at the undergraduate level was protected, the fate of public single-sex higher education institutions became open to judicial interpretation. (This will be discussed in more detail later in this chapter.)

Additional legislation providing higher education funding assistance would also affect women and their access to higher education institutions. The Middle Income Student Assistance Act of 1978 allowed middle-income as well as low-income college students to qualify for federal education assistance.[47] The Student Loan Consolidation and Technical Amendments Act of 1983, which legislated an 8 percent interest rate for Guaranteed Student Loans and extended the Family Contribution Schedule,[48] had a direct effect on the education of women. As Amy McCandless reports: "On a regional level, educational opportunity grants and guaranteed student loan programs have made it possible for more Southerners to attend college."[49] The long-term effect is that today more Southern women earn bachelor's and master's degrees than do men.[50] McCandless describes a trend that has actually taken hold nationwide.

The Effects of Societal Changes and New Legislation on Women's Colleges

Changes at All Higher Education Institutions

The combined effects of the demographic changes, societal trends, and legislative advances described earlier in this chapter significantly changed higher education institutions during the second half of the 20th century. According to the National Center for Education Statistics (NCES): "The 1950s and 1960s marked two major developments. First, large numbers of students entered college and second, public colleges expanded dramatically to meet the demand."[51] Higher education enrollment increased by 49 percent in the 1950s; during the 1960s, the increase was 120 percent. No longer were private four-year colleges the venue for half the students as in the pre-war years. Now 74 percent of students were in public institutions.[52]

Women became a far more familiar sight at higher education institutions, constituting the majority on college campuses by 1979.[53] In Fall 1961, approximately 38 percent of all college students were women. Three decades later, almost 55 percent of all students in higher education were women.[54]

As women became an increasing presence in higher education and more concerned with earning a living, their educational and career aspirations changed. As one education researcher noted during the 1970s: "Women are increasingly disinclined to opt for careers in traditionally

feminine fields (school teaching in particular) and now represent more than one-third of all freshmen aspiring to traditionally masculine careers such as engineering, medicine, law, and business. [They] reject the traditional view that the proper place for married women is with home and family."[55] Some examples from current education statistics show women obtaining a majority of accounting degrees, 42 percent of law degrees, and increasing numbers of medical degrees.[56] Chapter 3 of this report provides more statistics on women in higher education.

Changes at Women's Colleges

Women's colleges have historically played a part in raising women's career expectations. Access to higher education for women in the first half of the century meant, as described by one women's college president, "nursing, domestic science, food science, home economics, library science and teacher training."[57] During that period it was only at private women's colleges dedicated to the liberal arts that women studied mathematics and mathematics dependent fields, including economics, in significant numbers.[58]

After World War II, women entered higher education in record numbers, aided by changing societal attitudes, increased availability of financial assistance, and lowered barriers to higher education institutions. During this time, women's colleges were becoming a smaller part of the higher education universe. One historian calculated that there were 233 women's colleges in 1960 and that only 90 remained in 1986.[a] Another scholar wrote: "Between June 1968 and October 1968...64 women's colleges went coeducational or closed their doors, a remarkable phenomenon. Many prestigious men's colleges also opened their doors to women during this time."[59]

One historian of women's colleges estimates that 81 women's colleges closed their doors between 1960 and 1986.[60] For example, Ladycliff College, a small women's college, formerly in New York, went out of business in the early 1980s for financial reasons. Its grounds and buildings were purchased by the U.S. Military Academy and are now West Point's museum and visitor's center.[61]

According to Mariam Chamberlain, women were finding new avenues of access to higher education for many reasons, including the establishment of many new 2-year public colleges in the 1960s and 1970s.[62] Chamberlain also suggests that women's colleges were sometimes considered outdated as they were "no longer playing a significant role in higher education because they had not maintained their special historic role and promise."[63] All of these factors left many women's colleges struggling with declining enrollments and shrinking financial support.

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[a]Chamberlain, *Women in Academe: Progress and Prospects*, p. 119. Determining which institutions were women's colleges over three decades ago has proven to be quite a challenge. Estimates differ. The Women's College Coalition estimates the number of women's colleges in 1960 to be close to 300, Florence Fasanelli, in her own research, identified almost 315 institutions that were women's colleges at that time. As stated in an endnote in chapter 1, according to the *Education Directory*, prepared by the United States Office of Education, there were an estimated 252 women's colleges in 1960. However, comparisons of education statistics from several decades ago can be misleading due to different collection methods, problems in estimating for nonresponse, and the lack of resources available to collect this information compared to today. For more information on data collection problems throughout the history of collection of data on education, see *120 Years of American Education: A Statistical Portrait* by the U.S. Department of Education, National Center for Educational Statistics.

Women's colleges that were a part of larger, coeducational universities were merged with the larger institutions. Pembroke College in Rhode Island is an example of a women's college that disappeared as a women's college, because it merged with a coeducational institution. Pembroke Hall housed the women's college of Brown University, which began admitting women in 1891. Pembroke officially became a college in 1928, however, it no longer had separate degrees or faculty after 1954. During the 1960s and early 1970s, as at many other institutions, Brown's campus was rocked with protests. Issues that students protested included the Vietnam War, as well as Brown's curriculum, the role of minorities at the University, and curfews and restrictions that only applied to women at Brown. In this turbulent climate, Brown also decided to undergo an internal reorganization. In 1971, the dissolving of Pembroke as a college was officially called a merger.[64]

During this time, other leading single-sex institutions were turning to coeducation. As Shaffer noted in her report for *Congressional Quarterly*: "More significant than numbers is the standing of colleges taking the coeducational plunge. So long as institutions like Princeton, Yale and Vassar stood fast, the position of the one-sex liberal arts college seemed secure; when they fell, the cause seemed all but lost."[65] She went on: "Because of the reluctance of many bright girls to pursue their studies in an all-female environment, it is now taken for granted that all of the 'seven sisters' will become coeducational before long."[66]

As it has turned out, this analysis may have been premature. It is true that since 1960 there were women's colleges that became coeducational institutions, but the women's colleges that debated the possibility of going coeducational, and then decided to remain single-sex, including such well-known women's colleges as Smith and Wellesley, are thriving today. Discussion of changes in the status of women's colleges over the past three decades, however, must include the religious status of Catholic women's colleges, and the single-sex status of both public women's and men's colleges, as these institutions were also affected by the changing times.

Women's Colleges That Became Coeducational

Coeducation at the most famous institutions of higher education is commonplace today. But, in the late-1960s, when the Ivy League schools and others first started to become coeducational, there was a lot of interest and concern. For this was, after all, a radical change for schools that had been single-sex in some cases for well over 200 years.

Yale and Vassar considered developing a coordinate relationship that would have Vassar moving from Poughkeepsie, New York to New Haven, Connecticut, and keeping separate administration and financing while sharing some academic programs. Vassar turned down the plan and instead decided to stay where it was and become coeducational. Beginning in 1969, Yale, Princeton, and Dartmouth began to make plans to move to coeducation. Other all-male schools that joined them that year were Franklin and Marshall College in Pennsylvania, Georgetown University in Washington, D.C., The University of the South in Tennessee, Union College in New York, and Wesleyan University in Connecticut. Colgate University in New York actually housed 56 young women from Skidmore in what they called a "coeducation tryout."[67]

Women's colleges that decided to become coeducational institutions during the past few decades in addition to Vassar included Goucher College, as well as Wheaton College in Massachusetts, Queens College in North Carolina, Skidmore College in New York, and Connecticut College. There are women's colleges that have had documented success in increasing enrollments, however, others were disappointed at various problems that arose while changing to a coeducational institution.

One women's college became coeducational in the late 1980s because of shrinking enrollments, a decrease of 13 percent in applications, and "dismal demographic projections."[68] When another announced that it would go coeducational its applications increased by 65 percent.[69] When one women's college became coeducational it restructured and revamped its curriculum adding a full-scale sports program.[70] This college's decision to become coeducational followed a survey conducted by the college which showed, in the words of the college's president, that if the college "wished to maintain quality in the undergraduate program, it was going to be very difficult to do as a single-sex institution."[71] Becoming coeducational, however, was only one of the major changes which turned around this college after it faced major financial problems and low enrollment in the 1970s. Between 1978 and 1990, the enrollment tripled and the endowment quadrupled as adult education programs had been added with degree options for students above the traditional college age, which along with the restructured undergraduate curriculum were credited for the improvement in this college's fortune.[72] The president of one women's college told how coeducation came about at the faculty's request. Scientists on the faculty, concerned that young male scientists in the surrounding community needed more education for professional advancement, suggested that a Master's degree be offered to men, as it was to women. As she explained:

> The presence of the men in the classes in science, we felt, would have a good effect on the women. In those days there was a kind of folklore that women didn't do very well in either science or mathematics and that tended to be a self-fulfilling diagnosis. Anything that could make the women's study of these two subjects more serious would be an advantage. The enrollment of committed young male scientists in our classes might contribute to this result.[73]

Some colleges saw the downside of becoming coeducational institutions. One college assessed its first decade of coeducation and found that it "...fails to contribute positively to the changes occurring in society and instead, simply reinforces traditional male and female roles."[74] An assessment of another women's college's decision to go coeducational in the early 1970s found 17 years later that it had fallen behind comparable women's colleges in the numbers of women it sent to medical schools and "...men now dominate faculty councils."[75] Indeed, one account of a study of four former women's colleges reported that "the transition to a mixed campus took at least 10 years and cost the colleges large sums of money for new sports facilities, residence halls, and recruitment of male students and male teaching staff. The most telling disadvantage was that men soon came to dominate both classroom discussions and the student community."[76]

In a 1977 study on what he termed "change colleges," colleges that had moved from single-sex to coeducational, researcher Richard Anderson noted: "the change to coeducation had serious and undesirable environmental consequences at hitherto female colleges."[77] Researcher Elizabeth Tidball, in 1985 and 1986 studies, found lower numbers of women graduates from

women's colleges that had become coeducational going on to medical school or earning a doctorate in one of the natural sciences, than women from women's colleges.[78] (See further discussion of this issue in chapter 4.)

Women's Colleges That Chose to Remain Women's Colleges

For women's colleges that have survived the changes of the last few decades, one strategy for success included enhancing connections with all-male or coeducational institutions. Another strategy at women's colleges involved revising curricula, restructuring management, and adding new programs, not unlike other small, liberal arts institutions of the times that faced new competition from the rising numbers of public institutions. A few women's colleges were unique in that they were protected by large endowments and active alumnae, allowing them to keep their institutional missions of serving women in the face of many challenges by coeducational institutions, both public and private.

From the mission statement of Scripps College we learn: "While many colleges are now coeducational, Scripps continues as a women's college because it believes that having women at the core of its concerns provides the very best environment for intellectually ambitious women to learn from a distinguished teaching faculty and from each other."[79] Scripps' mission statement, adopted by the college's Board of Trustees in 1994, demonstrates Scripps' commitment to remaining all-female. However, Scripps also publicizes the fact that it is a part of the Claremont consortium, situating it across the street from coeducational institutions:

> Modeled after the Oxford University plan of small, coordinating residential colleges with central, university-level services and a graduate school, Scripps and the five other Claremont Colleges—Claremont McKenna, Harvey Mudd, Pitzer, Pomona and The Claremont Graduate School—are the finest assembly of small, liberal arts colleges in the United States.[80]

Smith College, in its promotional materials, also reaffirms its mission as a women's college. From a Smith College catalogue:

> Not surprisingly, when Vassar began to accept men, and Yale, Princeton and Dartmouth to accept women as candidates for degrees, some members of the college community wondered whether Smith should also become coeducational. In 1971, a committee of trustees, faculty, administration, students and alumnae...concluded that admitting men as candidates for the Smith degree would detract from the founding purpose of the college, the best possible education for women.[81]

Like Scripps, Smith publicizes that during the 1960s it formed a way of broadening student experiences through participating in consortia: "The college made more varied educational experiences available...by extending cooperation with its neighbors—Amherst, Hampshire, Mount Holyoke colleges and the University of Massachusetts."[82]

In Pennsylvania, Bryn Mawr College and Haverford College have an exchange program. As one historian wrote: "In this case, it was the men's college that turned to the women's college in time of economic need. Haverford College, afflicted with a $2 million deficit, tried to merge with Bryn Mawr College in 1974. Bryn Mawr wanted to keep its autonomy but was

willing to engage in an exchange. Each campus has maintained its identity, but options have opened for both."[83]

Women's colleges continue to publicize their connections with coeducational institutions today. Currently, Wellesley College has a close relationship with MIT, allowing students to enroll in courses at both schools. Wellesley, Smith, and Mount Holyoke participate in a twelve college exchange program with Amherst, Bowdoin, Connecticut, Dartmouth, Trinity (CT.), Vassar, Wesleyan (CT.), Wheaton, and Williams, allowing students to spend a semester or a year at each other's schools. In Virginia, a similar seven-college exchange program includes Randolph-Macon Woman's College, Hollins College, Mary Baldwin College and Sweet Briar College, all of which are all-female, along with the all-male Hampden-Sydney College, and the coeducational Washington and Lee University, and Randolph-Macon College. Randolph-Macon Woman's College and Sweet Briar College also have cross-registration with the coeducational Lynchburg College.[84]

As *The Economist* reported in 1987, "survival tactics" of women's colleges included these academic exchanges with men's colleges and the development of continuing-education programs for older women.[85] For example, Chatham College has remained a women's college by adapting to the needs of older students in creating new programs. As stated in the college catalogue: "The Gateway Program, begun for women over the age of 23 seeking a baccalaureate degree, was one of the first such programs in the country designed to address the needs of the adult woman student." This program was established in the 1970s.[86]

Like many small, primarily liberal arts colleges during the past three decades, women's colleges restructured in order to increase efficient use of resources. For example, Hood College in Maryland, was determined to remain a women's college and took a pragmatic approach to preserving its institutional mission. The college faced the challenges of the last few decades by using various strategies to bolster its enrollment. The college eliminated some underenrolled or duplicative courses, launched new programs of study, adopted a core curriculum, and made planning an integral part of every department, improved budgeting and student services, and professionalized its fund-raising.[87] Another example is Russell Sage College in New York. Russell Sage ended a 15-month self-study by deciding to remain a women's college, enhancing enrollments by expanding its career services and internships, and adopting new recruitment techniques. The college found it had a "special market niche" because it offered training in nursing and physical therapy, as well as public administration and business.[88]

One education historian notes: "A century ago separate private colleges for either men or women constituted an economic luxury. Only men's colleges that could afford it kept women out. Today only the few women's colleges that have large enough endowments and sufficient alumnae support can remain single sex."[89] Endowments have been a factor in the ability of some women's colleges to remain solvent within larger institutions, or remain totally independent. For example, Radcliffe College has kept its own endowment separate from that of Harvard University, even though Harvard and Radcliffe classes have included both sexes as far back as 1943, during World War II when the faculty was depleted.[90] Chapter 1 describes how Radcliffe and Harvard merged in the 1970s and women were granted Harvard degrees.

Also noted in chapter 1, H. Sophie Newcomb Memorial College for Women in New Orleans began with a generous endowment. Tulane University, where Newcomb is a coordinate was

forced to use some of the endowment to cover operating deficits during the 1970s. The income from the now fully restored fund will offset expenses for the "unique and historic mission of Newcomb College to educate women."[91] Some autonomous women's colleges have strong financial foundations due to their generous endowments. Agnes Scott, Smith, Wellesley, Mount Holyoke, and Bryn Mawr have endowments that rank among the 120 largest endowments of higher education institutions in the United States.[92] However, some smaller institutions such as Bennett College and the Catholic women's colleges have still survived and thrived despite smaller endowments.

The involvement of women's college alumnae was notably and publicly strong at some institutions when consideration of closing or going coeducational was debated. The alumnae have played important roles in strengthening the missions of women's colleges. When the trustees of Wilson College, in Pennsylvania, voted to close Wilson, a group of alumnae brought a lawsuit to keep the doors open. Since then, the college's programs have been transformed to meet the changing interests and ages of its students. For example, the college created a division of continuing studies.[93]

Russell Sage College, mentioned previously, studied the possibility of becoming coeducational for 15 months before deciding to remain a women's college. One key factor was that 99 percent of the alumnae wanted it to remain single-sex.[94] Alumnae involvement has not always helped keep women's colleges single-sex. At one women's college, the plan to admit men started a bitter fight on and off the campus.[95] Student and alumnae groups mobilized through "legal action to fight what they believed was a breach of faith," but were ultimately unsuccessful.[96]

Changes at Catholic Women's Colleges

The societal and legislative forces that changed so many of the women's colleges in the last few decades also had an effect on Catholic women's colleges. In their early history, Catholic women's colleges, which began as academies for Catholic girls, all had a mission of providing religious education. This began to change when nuns asked for additional secular education, and again, when the church hierarchy bent its traditional ways to allow for general education for Catholic women.[97]

Chapter 1 described how many Catholic women's colleges were founded between World War I and World War II. But the numbers of Catholic women's colleges declined in the decades after World War II. For example, the College of New Rochelle in New York decided to become a secular institution, and during the 1960s and 1970s it expanded, adding a graduate school, a nursing school, and a school for adult learners. But the college did continue its original mission of serving women by keeping its School of Arts and Sciences all-female.[98]

One historian used Webster College of Missouri (now Webster University, a coeducational institution), as an example of how a Catholic women's college decided to become a secular institution, for in 1967, as the curriculum was becoming more secular, more and more lay faculty were teaching at the institution. "The reshaping of the curriculum made the reshaping of the governance necessary for educational and financial reasons."[99] Finances were a major consideration: "Costs spiraled and funds for education in the religious sector became more difficult to find."[100]

Other Catholic women's colleges, such as Ladycliff mentioned earlier in this chapter, failed for financial reasons. But some of the Catholic women's colleges founded in the 1920s, such as Regis College in Massachusetts, Rosemont College in Pennsylvania, Mount St. Mary's College in California, and Notre Dame College of Ohio, have remained true to their original institutional missions and are still Catholic women's colleges. Elizabeth Tidball wrote about the strengths of Catholic women's colleges and how these institutions developed strategies that keep them functioning today:

> They have the highest proportion of women presidents of any group of colleges or universities in the country (Office of Women in Higher Education, 1984). Both in terms of opportunities for professional women and in terms of role models for women students, this is an asset of considerable value. Roman Catholic women's colleges have pioneered a variety of educational delivery systems—the weekend college, summers-only programs, competency-based education, credit for noncollege experience, contract learning—many of which have been especially beneficial to women with meager financial resources and minimal previous contact with higher education. In these ways the Roman Catholic colleges have adapted their dedication to service to the modern era and in particular, to serving women who would otherwise remain underserved.[101]

A scholar of Catholic women's colleges found that they were more likely to have tenured women faculty than other women's colleges, and that they had "an increasing commitment to the enrollment of minority students."[102] (Catholic colleges have played a role in providing higher education opportunities for the Latino population.) This scholar found that alumnae giving to Catholic women's colleges was higher than to other women's colleges, and therefore suggested that "The loyalty of so many women to these institutions suggests a bright future for networking and the possibility of forming strong alliances among Catholic educated women."[103] Indeed, such famous women as Barbara Mikulski, the Senator from Maryland, and Geraldine Ferraro, the first female vice presidential nominee of a major political party, are graduates of Catholic women's colleges.[104]

Changes at Public Single-Sex Institutions

As discussed in Chapter 1, only three public women's colleges remain today, Douglass College of Rutgers University, Texas Woman's University, and Mississippi University for Women (MUW). Douglass College is one school of a coeducational university, and Texas Woman's University and MUW both admit men, but clearly state in their promotional materials that their institutional mission is to further women's education.

In 1982, MUW was ordered by the United States Supreme Court to admit men as a result of a suit brought against the school by a man who had been denied admission to the nursing program because of his sex. This case, as Justice Sandra Day O'Connor said in the opinion of the court: "...presents the narrow issue of whether a state statute that excludes males from enrolling in a state-supported professional nursing school violates the Equal Protection Clause of the 14th Amendment."[105]

The State's argument for maintaining a single-sex admissions policy was that it "compensates for discrimination against women, and therefore, constitutes educational affirmative

action."[106] The Supreme Court accepted the State's argument, however, it found that for the nursing school there was an affirmative action rationale for encouraging male applicants. The Court stated that "MUW's policy of excluding males from admission to the School of Nursing tends to perpetuate the stereotyped view of nursing as an exclusively women's job."[107] The Court decided in favor of Hogan, ruling that the school violated the Equal Protection Clause of the Fourteenth Amendment. The Board of Trustees of State Institutions of Higher Learning in Mississippi required the institution to admit men: "In 1988, the Board of Trustees reaffirmed the mission of MUW as an institution of quality academic programs for all qualified students with emphasis on distinctive opportunities for women. Today, the university refers to itself as Mississippi University for Women...and smart men, too!"[108]

More recently, the U.S. Supreme Court decision in favor of the United States in the case "United States v. Virginia et al." brought discussion of single-sex public institutions into the public's eye. The Virginia Military Institute (VMI), a public military institution of higher education, is famous for its over 150-year history of admitting males only, its rigorous physical and emotional challenges to its freshmen, including the infamous "Rat Line" where cadets endure face-to-face inquisitions, and its influential and loyal alumni network. In 1989, the U.S. Justice Department received a complaint from a female Virginia high school student who had been denied an application to VMI. In 1990, the Justice Department put then-Virginia governor Douglas Wilder on notice that, "VMI's male-only policy violated the U.S. Constitution and the federal Civil Rights Act."[109]

This set in motion six years of litigation, during which the state, under court order, established the Virginia Women's Institute for Leadership (VWIL) at Mary Baldwin College, a private women's college near the VMI campus. According to the *Mary Baldwin College Academic Catalogue*, VWIL students, in addition to completing both the college's General Education requirements and an academic major, would be required to do additional work in four areas: (1) academic curriculum; (2) physical and health education curriculum; (3) miliary leadership (ROTC); and (4) co-curricular program. ROTC classes were to be held on the VMI campus.[110] Women began their training in the VWIL in the summer of 1995.[111]

In October 1995, the Supreme Court agreed to hear the VMI case. The Women's College Coalition (WCC), an organization representing women's colleges, sponsored the drafting of an amicus brief in support of the government's challenge to VMI's single-sex status. This brief, signed by 26 members of the WCC, presented the position of private women's colleges, that the mission of some single-sex schools was to end rather than continue traditional gender classifications.[112]

One of the issues decided was that the plan Virginia had put in place was unconstitutional because it was unequal in its public support of VMI and the VWIL. The constitutional standard that Virginia failed to meet was the same one that had been used previously "...in the Hogan vs. Mississippi University for Women case where Justice Sandra Day O'Connor characterized the constitutional standard for gender discrimination."[113] The Court's seven to one decision (Justice Clarence Thomas abstained) that VMI must admit women or give up its state funding was announced in June, 1996. Faced with a choice of becoming a private institution or admitting women, VMI's Board of Visitors voted nine to eight to admit women starting in 1997. As The Citadel, of South Carolina had decided earlier to become

coeducational, the VMI vote ended the history, not only of public all-male institutions of higher education, but also of public all-male military colleges in the United States.[114]

Regarding the outcome of the case, the Executive Director of the WCC stated that: "Neither private women's colleges, nor private men's colleges are adversely implicated by the Supreme Court's decision."[115] Indeed, the public debate over coeducational vs. single-sex education has brought more attention to the remaining single-sex higher education institutions. The women's colleges that remain today are increasing their enrollments, as documented in chapter 3 of this report.

Conclusion

The social trends that have changed America in the second half of the 20th century, and the legislation that opened many doors of higher education to those who had previously been denied access, affected the history of women's education at coeducational and women's colleges in the period from 1960 to today. A drive for equality in educational opportunity, as well as changing demographics and new legislation, caused many men's and women's colleges to change to coeducation over the past three decades.

As women's roles changed in American society, women sought more education and different educational opportunities in order to fulfill those roles. During the past three decades there was sometimes doubt as to whether attending a women's college was the best way to meet women's educational and career aspirations. In addition to uncertainty over their institutional missions in the face of societal changes, financial problems and competition from coeducational institutions caused many women's colleges to close during this period.

This chapter told the story of women's colleges that chose to become coeducational, but also of those that weathered the last few decades by reevaluating and restating their institutional missions. In some cases, these colleges added new programs and appealed to students above the traditional college age as a part of restructuring their institutions in a way that supported their original mission as women's colleges. While many women's colleges fell victim to the changing times, those that have survived have adapted themselves to best prepare women to meet the new challenges that they face in American society today.

Notes

1. Mariam K. Chamberlain, (ed). *Women in Academe: Progress and Prospects.* New York: Russell Sage Foundation, 1988, p.107.
2. Barbara Miller Solomon, *In the Company of Educated Women: A History of Women and Higher Education in America.* New Haven, CT: Yale University Press, 1985, p. 207.
3. Barbara Deckard, *The Women's Movement.* New York: Harper & Row, 1975, p. 307.
4. Deckard, *The Women's Movement*, pp. 307–308.
5. Solomon, *In the Company of Educated Women*, p. 188.
6. Solomon, *In the Company of Educated Women*, p. 188.
7. Joyce Gelb and Marian Lief Palley, *Women and Public Policies.* Princeton, NJ: Princeton University Press, 1982, p. 4.
8. Congressional Quarterly, *Editorial Research Reports on The Women's Movement.* Washington, DC: Congressional Quarterly, Inc., 1973, p. 12.
9. Betty Friedan, *The Feminine Mystique.* New York: W.W. Norton & Company, Inc., 1963.
10. William H. Chafe, *Women and Equality.* Oxford: Oxford University Press, Inc., 1977, pp. 94–95.
11. Chafe, *Women and Equality*, p. 94.
12. Chamberlain, *Women in Academe: Progress and Prospects*, p. 1 14.
13. Friedan, *The Feminine Mystique*, p. 15.
14. Rosemary Park, "Some Considerations on the Higher Education of Women" in Helen S. Astin and Werner Z. Hirsch (eds), *The Higher Education of Women: Essays in Honor of Rosemary Park.* New York: Praeger Publishers, 1978, p. 23
15. Congressional Quarterly, *Editorial Research Reports on The Women's Movement*, pp. 12–13.
16. Chafe, *Women and Equality*, p. 102.
17. Deckard, *The Women's Movement*, pp. 325–326.
18. Deckard, *The Women's Movement*, pp. 327–328.
19. Solomon, *In the Company of Educated Women*, p. 201.
20. Deckard, *The Women's Movement.* p. 330,
21. Chafe, *Women and Equality*, p. 97.
22. Deckard, *The Women's Movement.*, pp. 344–345.
23. Elizabeth Gleick, "Hell Hath No Fury," *Time.* October 7, 1996, p. 83.

24. Hugh Carter and Paul C. Glick, *Marriage and Divorce.* Cambridge, MA: Harvard University Press, 1976, p. 466.

25. U.S. Department of Education, *Digest of Education Statistics, 1995.* Washington, D.C.: Government Printing Office, 1995, p. 366.

26. Solomon, *In the Company of Educated Women,* p.190.

27. Solomon, *In the Company of Educated Women,* p. 190

28. Solomon, *In the Company of Educated Women,* pp. 189–190.

29. Thomas Wolanin and Lawrence Gladieux, "The Political Culture of a Policy Arena: Higher Education," *What Government Does.* (Matthew Holden, Jr. and Dennis L. Dresang, eds.) Beverly Hills, CA: Sage Publications, 1975, p. 190–191.

30. U.S. Department of Education. *Digest of Education Statistics, 1995,* p. 367.

31. Gelb and Palley, *Women and Public Policies,* p. 6.

32. U.S. Department of Education, *Digest of Education Statistics, 1995,* p. 368.

33. U.S. Department of Education, *Digest of Education Statistics. 1995,* p. 368.

34. U.S. Department of Education, *Digest of Education Statistics, 1995,* p. 369.

35. Wolanin and Gladieux, "The Political Culture of a Policy Arena: Higher Education," p. 180.

36. Gelb and Palley, *Women and Public Policies,* p. 100.

37. Gelb and Palley, *Women and Public Policies,* p. 100.

38. U.S. Department of Education, *Digest of Education Statistics, 1995,* pp. 369–370.

39. Gelb and Palley, *Women and Public Policies,* p. 95.

40. Gelb and Palley, *Women and Public Policies,* p. 96.

41. Gelb and Palley, *Women and Public Policies,* pp. 102–103.

42. Gelb and Palley, *Women and Public Policies,* pp. 124.

43. L. Leotus Morrison, "From the Playing Fields and Courts," *Educating the Majority: Women Challenge Tradition in Highest Education.* (Carole S. Pearson, Donna L. Shavlik, and Judith G. Touchton, eds.) New York: Collier Macmillan Publishers, 1989, p. 254.

44. Morrison, "From the Playing Fields and Courts," p. 254.

45. Bernice Sandler, *The Restoration of Title IX: Implications for Higher Education.* Washington, DC: Association of American Colleges, Project on the Status of Women, 1989.

46. Sandler, *The Restoration of Title IX: Implications for Higher Education.*

47. U.S. Department of Education, *Digest of Education Statistics, 1995,* p. 370.

48. U.S. Department of Education, *Digest of Education Statistics, 1995,* p. 371.

49. Amy Thompson McCandless, "The Higher Education of Black Women in the Contemporary South," *The Mississippi Quarterly*. Vol. XLV, No. 4, 1992, p. 454.

50. McCandless, "The Higher Education of Black Women in the Contemporary South." p. 454.

51. U.S. Department of Education, *120 Years of American Education: A Statistical Portrait*, Washington, D.C.: Government Printing Office, 1993, p. 66.

52. U.S. Department of Education, *120 Years of American Education: A Statistical Portrait*, pp. 65–66.

53. U.S. Department of Education, *120 Years of American Education: A Statistical Portrait*, p. 66.

54. U.S. Department of Education, *120 Years of American Education: A Statistical Portrait*, pp. 76–77.

55. Alexander Astin, "The Undergraduate Woman," *in The Higher Education of Women: Essays in Honor of Rosemary Park*, p. 111.

56. U.S. Department of Education, *Digest of Education Statistics, 1995*, pp. 264, 278.

57. Jill Kerr Conway, "Higher Education for Women," *American Behavioral Scientists*. Vol. 32, No. 6, 1989, p. 633.

58. Conway, "Higher Education for Women," p. 633–639.

59. Joy K. Rice, "Separation and the Education of Women," *Initiatives*. Vol. 53, No. 3, 1991, p. 6.

60. Chamberlain, *Women in Academe: Progress and Prospects*, p. 121.

61. Conversations with current administrators at the U.S. Military Academy.

62. Chamberlain, *Women in Academe: Progress and Prospects*, p. 120.

63. Chamberlain, *Women in Academe: Progress and Prospects*, pp. 120–121.

64. Janet M. Phillips, *Brown University: A Short History*. This history appears on Brown University's web site: "http://www.brown.edu".

65. Congressional Quarterly, *Editorial Research Reports on The Women's Movement*, p. 149.

66. Congressional Quarterly, *Editorial Research Reports on The Women's Movement*, p. 151.

67. Congressional Quarterly, *Editorial Research Reports on The Women's Movement*, pp. 149–151.

68. —— "Women's Colleges," *The Economist*. May 30, 1987, pp. 35–36.

69. —— "Women's Colleges," *The Economist*, pp. 35–36.

70. Douglas Lederman, "To Survive, Queens College Switched to Coeducation and Revamped Its Curriculum-And Now It's Added a Full-Scale Sports Program," *Chronicle of Higher Education*. February 21, 1990, pp. A43–A45.

71. Lederman, "To Survive, Queens College Switched to Coeducation and Revamped Its Curriculum-And Now It's Added a Full-Scale Sports Program," pp. A44–A45.

72. Lederman, "To Survive, Queens College Switched to Coeducation and Revamped Its Curriculum-And Now It's Added a Full-Scale Sports Program," pp. A43.

73. Helen S. Astin, "Interview with Rosemary Park," in *The Higher Education of Women*, p. xvii.

74. —— "Women's Colleges," *The Economist*, pp. 35–36.

75. —— "Women's Colleges," *The Economist*, pp. 35–36.

76. —— "Women's Colleges," *The Economist*, pp. 35–36.

77. M. Elizabeth Tidball, "Women's Colleges: Exceptional Conditions, Not Exceptional Talent, Produce High Achievers," *Educating the Majority: Women Challenge Tradition in Higher Education.* (Carole S. Pearson, Donna L. Shavlik, and Judith G. Touchton, eds.) New York: Collier Macmillan Publishers, 1989, p. 168.

78. Tidball, "Women's Colleges: Exceptional Conditions, Not Exceptional Talent, Produce High Achievers," p. 168.

79. "The Mission," *Scripps, The Women's College, Claremont; 1994–96 Catalog*, p.4.

80. "The Mission," *Scripps, The Women's College, Claremont; 1994–96 Catalog*, p. 5.

81. *Smith College Bulletin: 1994–1995 Catalog*, p. 8.

82. *Smith College Bulletin: 1994–1995 Catalog*, p. 7. This Five College interchange was developed as a part of the founding of Hampshire College.

83. Susan Romer Kaplan, "Women's Education: The Case for the Single-Sex College," in *The Higher Education of Women*, p. 63.

84. Various college catalogues.

85. —— "Women's Colleges," *The Economist*, pp. 35–36.

86. *The Chatham College Catalog* 1995–96, p. 10.

87. Donna Shoemaker, "Hood College," *Educational Record.* Vol. 63, No. 1, Winter 1982. pp. 52–57.

88. —— "Women's Colleges," *The Economist*, p 36.

89. Solomon, *In the Company of Educated Women*, p. 207.

90. Solomon, *In the Company of Educated Women*, p. 188.

91. Nick Marmielo, "For Newcomb's Future," *Tulanian.* New Orleans, LA: Tulane Office of University Publications. Summer 1996. p. 5.

92. U.S. Department of Education, *Digest of Education Statistics, 1995*, p. 360

93. Julie L. Nicklin, "The Renaissance of Wilson college, a Financial and Academic Success," *Chronicle of Higher Education.* Vol. 36, No. 27, March 21, 1990, p. A3.

94. —— "Women's Colleges," *The Economist*. p. 35-36.

95. Michael W. Hirschorn, "Plan to Admit Men to Wheaton College Stirs Bitter Fight on and off the Campus," *Chronicle of Higher Education*. May 20, 1987, p. 30.

96. Hirschorn, "Plan to Admit Men to Wheaton College Stirs Bitter Fight on and off the Campus, " p. 31.

97. Stewart, George C. Jr., *Marvels of Charity: History of American Sisters and Nuns*, Huntington, IN.: Our Sunday Visitor Publishing Division, 1994, p. 328.

98. *College of New Rochelle, School of Arts & Sciences*, 1994-1995, pp. 7-8.

99. Esther Rauschenbush, "Three Women: Creators of Change," in *The Higher Education of Women*, p. 38.

100. Rauschenbush, "Three Women: Creators of Change," p. 40.

101. Tidball, "Women's Colleges: Exceptional Conditions, Not Exceptional Talent, Produce High Achievers," pp. 158-159

102. Abigail McCarthy, "A Luminous Minority: The Contributions of Catholic Women's Colleges, in *Educating the Majority: Women Challenge Tradition in Higher Education*, p.179.

103. McCarthy, "A Luminous Minority: The Contributions of Catholic Women's Colleges," p. 180.

104. McCarthy, "A Luminous Minority: The Contributions of Catholic Women's Colleges," p. 173.

105. Mississippi University for Women v. Hogan. 102 S.Ct.3333 (1982).

106. Mississippi University for Women v. Hogan, 102 S.Ct.3337.

107. Mississippi University for Women v. Hogan, S.Ct.3339.

108. *Mississippi University for Women 1994-95 Bulletin*, p. 9.

109. Donald P. Baker, "By One Vote, VMI Decides to Go Coed," *The Washington Post*. September 22, 1996, p. A10.

110. *Mary Baldwin College Academic Catalogue 1995-1996*, p. 143-144.

111. Baker, "By One Vote, VMI Decides to Go Coed." p. A10.

112. United States Supreme Court Amicus Brief. October Term, 1995. November 16, 1995. *Brief of Twenty-six Private Women's Colleges As Amici Curiae in Support of Petitioner*. West, 1996.

113. Jadwiga S. Sebrechts, "The Perspective of Women's Colleges on the Supreme Court Decision on VMI" in a Memorandum, Washington, D.C.: Women's College Coalition, August 1, 1996.

114. Baker, "By One Vote, VMI Decides to Go Coed," p. A10. The Citadel of South Carolina, was the only other state-supported military college left existing in the U.S. in

1996 with a history of being all-male After the much-publicized short admission of Shannon Faulkner in 1995, and the Supreme Court ruling in 1996, The Citadel chose to go officially coeducational and enrolled 4 women in the Fall 1996 class. All other public U.S. military higher education institutions have been coeducational for over 20 years.

115. Sebrechts, "The Perspective of Women's Colleges on the Supreme Court Decision on VMI."

Chapter 3:

Women's Colleges in the United States, A Statistical Portrait

Introduction

By providing higher education opportunities to women at a time when the doors of most higher education institutions were closed to them, women's colleges have played an important role in the rich history of higher education in the United States. However, as discussed in chapter 2, changes in societal norms and subsequent changes in legislation in recent decades have created additional opportunities in higher education for women. As women have faced more choices in higher education, women's colleges have had to compete for women students. Many women's colleges addressed the challenges of competition by promoting what they saw as their strengths, that compared to other types of higher education institutions, women's colleges provide:

- smaller campuses with more personal atmospheres;
- access to higher education for older undergraduate women students, minority women students, and part-time students;
- proportionally more women students choosing to pursue science and mathematics; and,
- more women in leadership roles throughout the campus.

The U.S. Department of Education collects data on all institutions of higher education.[1] What do these data tell us about women's colleges? The purpose of this chapter is to provide some information that shows where women's colleges stand in the "larger picture" of institutions of higher education, as well as providing somewhat of a "snapshot" of what women's colleges look like today. Examination of the size of women's colleges, the diversity of women attending women's colleges, the fields in which women are achieving their degrees, and the numbers of women in professional positions, provides a framework for studying the status of women's colleges as they approach the next century.

First, some information on the statistics and methodology used in this chapter. Analysis of data provided to the U.S. Department of Education by women's colleges allows us to study institutional characteristics, enrollment, degree completion, staffing, and faculty salaries at women's colleges, and compare these data to data for similar-sized institutions as well as the larger universe of all institutions of higher education.[2] The data in this chapter were reported to the U.S. Department of Education through the former Higher Education General Information Survey (HEGIS) and the current Integrated Postsecondary Educational Data System (IPEDS) of the National Center for Education Statistics (NCES).[3] As IPEDS does not currently provide an indicator identifying women's colleges, this report used a list from the Women's College Coalition (WCC) in order to identify women's colleges for Fall 1993, the most recent year for which IPEDS data were available for publication in this report.

As of Fall 1993, the WCC identified 83 public and private nonprofit higher education institutions in the United States that considered themselves women's colleges, because of both large proportions of women enrolled and an institutional mission that included an emphasis on higher education for women.[4] For the purposes of this report, 76 of these institutions will be analyzed through the use of IPEDS data. These institutions are listed in table A. These were the only women's institutions that reported data to HEGIS and IPEDS every year between Fall 1976 and Fall 1993. Use of these institutions provides this report with a consistent database allowing for analysis of institutional characteristics and enrollment trends. Other analyses will include information on degrees awarded, staffing, and faculty salaries for these institutions, using the most recent data available during the writing of this report.[5] Most sections of this chapter will compare data from women's colleges with averages of data provided from institutions of similar type and control. These comparisons will allow examination of those characteristics unique to women's colleges.

Text Table A—Women's Colleges in the United States: Fall 1993

Agnes Scott College	Fisher College	Regis College
Alverno College	Georgian Court College	Rosemont College
Aquinas College at Milton	Harcum Junior College	Russell Sage College Main
Aquinas College at Newton	Hollins College	Campus
Barnard College	Hood College	Saint Joseph College
Bay Path College	Immaculata College	Saint Mary-of-the-Woods
Bennett College	Judson College	College
Blue Mountain College	Lasell College	Saint Mary's College (IN)
Brenau University	Lesley College	Saint Mary's College (NC)
Bryn Mawr College	Mary Baldwin College	Salem College
Carlow College	Marymount College	Scripps College
Cedar Crest College	Marymount Manhattan College	Seton Hill College
Chatham College	Meredith College	Simmons College
Chestnut Hill College	Midway College	Smith College
College of New Rochelle	Mills College	Southern Virginia College for
College of Notre Dame Maryland	Mississippi University for Women	Women
College of Our Lady of the Elms	Moore College of Art and Design	Spelman College
College of Saint Benedict	Mount Holyoke College	Stephens College
College of Saint Catherine*	Mount Mary College	Sweet Briar College
College of Saint Elizabeth	Mount Saint Mary's College	Texas Woman's University
College of Saint Mary	Mount Vernon College	Trinity College (DC)
Columbia College	Notre Dame College of Ohio	Trinity College (VT)
Converse College	Peace College	Ursuline College
Cottey College	Pine Manor College	Wellesley College
Emmanuel College	Randolph-Macon Woman's College	Wells College
Endicott College		Wesleyan College
		William Woods College
		Wilson College

*Saint Catherine Campus.

SOURCE: Women's College Coalition (WCC). These institutions have reported data to the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS) consistently from Fall 1976 through Fall 1993.

Institutional Characteristics

Size

Women's colleges today typically are private 4-year institutions, and they tend to have smaller enrollments than most institutions of higher education. Promotional literature for many women's colleges stresses the personal atmosphere of these colleges. At one women's college the institution's mission statement includes the promise "to create a warm and personal atmosphere in which to learn by remaining a small college....[which] recognizes individual needs and affords opportunities for personal contact with faculty dedicated to ideas and to their significance for the contemporary world."[6] Women's colleges are indeed small, close to 85 percent of women's colleges had enrollments of fewer than 2,500 students, compared with a little under 61 percent of all institutions of higher education (table 3.1).[7]

Figure 3.1—Women's colleges in the United States: Fall 1993.

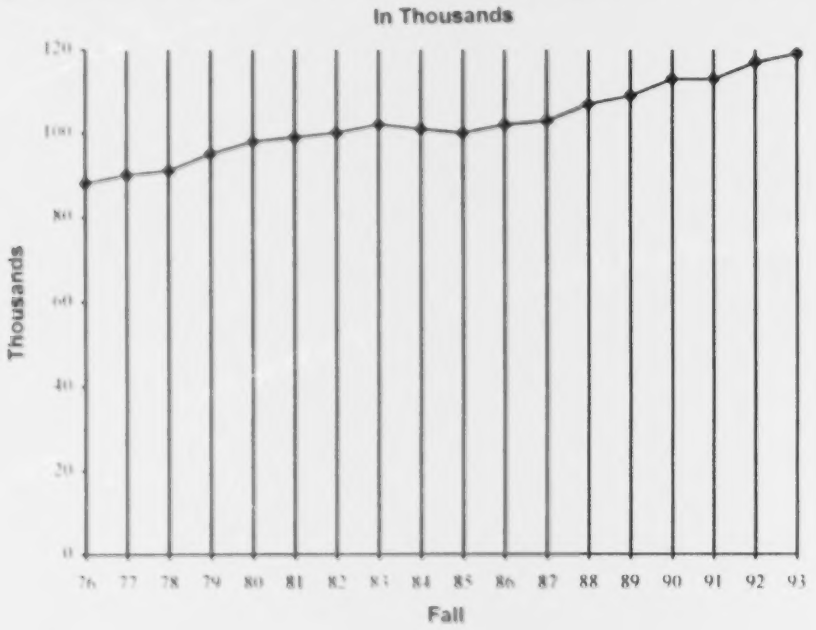
NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, PLLI.

Affiliation

Over one half of women's colleges have a religious affiliation, most often with the Roman Catholic Church. Chapter 1 contains a description of the close historical relationship between the Catholic Church and women's colleges. This relationship is reflected in the data—33 percent of women's colleges are affiliated with the Catholic Church, while only 7 percent of all institutions of higher education have such an affiliation. An additional 18 percent of women's colleges are affiliated with a church of Protestant denomination. A little over 46 percent of women's colleges are independent, nonprofit institutions, compared with 20 percent of all institutions of higher education. This reflects the historic origins of women's colleges as private schools, as discussed in chapter 1. Forty-five percent of all institutions of higher education are public institutions, while only approximately 3 percent of women's colleges are public institutions (table 3.2).

Figure 3.2a— Enrollment at women's colleges: Fall 1976–Fall 1993.



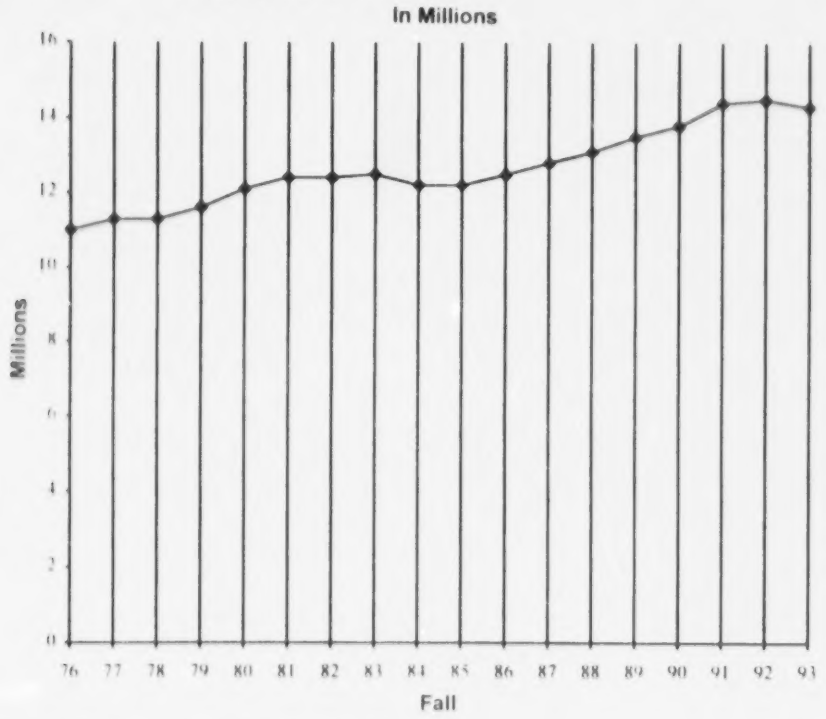
Note: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

Source: U.S. Department of Education, PEIP.

Location

A geographical look at women's colleges reveals an interesting comparison to the larger universe of institutions of higher education. Almost half of all women's colleges are in the Northeastern United States. This is in contrast to the fact that a little less than a quarter of all institutions of higher education are located in the Northeast. The region with the second largest number of women's colleges is the South, home to 33 percent of women's colleges (table 3.3).

Figure 3.2b—Enrollment at all institutions of higher education: Fall 1976–Fall 1993.



Source: U.S. Department of Education, PLLI.

In the 19th century, early independent women's colleges were founded in the Northeastern United States. Soon after, small Protestant women's colleges began to grow in numbers in the South. So it is not surprising that those two regions of the country still have the largest numbers of women's colleges. Figure 3.1 reveals that only three women's colleges are in the West, all in California. The two public women's colleges discussed in this chapter are the Mississippi University for Women and Texas Woman's University, both located in the South.

Enrollment Trends

Overall Enrollment at Women's Colleges Twenty Years Ago and Today

The education researcher faces unique challenges in studying women's colleges over time. Women's colleges have represented a small portion of the higher education universe. Total enrollment data, including both men and women attending all institutions of higher education full-time and part-time, show that in 1993, women's colleges accounted for 119,000, or less than one percent of the 14.3 million students enrolled in all institutions of higher education. This makes analysis of enrollment trends at women's colleges difficult because the significance of changes in the enrollment at women's colleges may not be clear when compared to the much larger group of all higher education institutions.

Women's colleges are single-sex only at the undergraduate level. They are an exception to the Education Amendments of 1972 to the Higher Education Act of 1965 which prohibited sex bias in admission to vocational, professional and graduate schools, and public institutions of higher education. And as discussed in chapter 2, over the past three decades many women's colleges have closed or become coeducational. Despite these special difficulties in studying women's colleges, it is important to identify some trends in enrollment at women's colleges in order to provide the "larger picture" of how women's colleges got to where they are today in terms of the numbers and types of students enrolled.

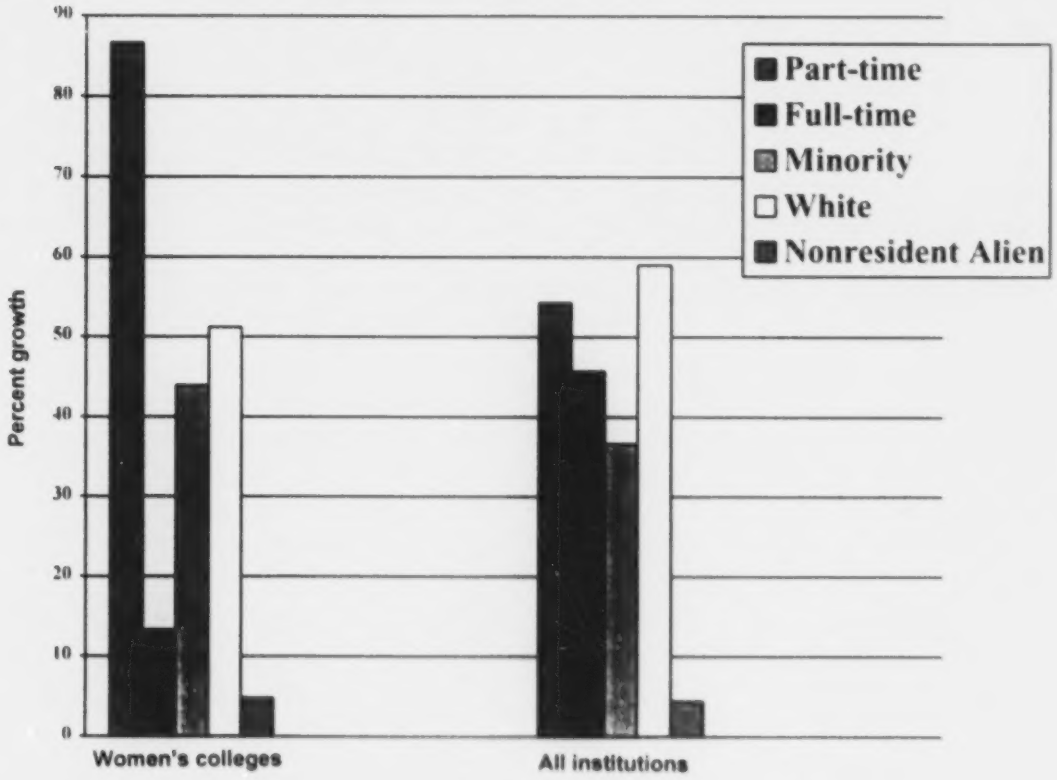
A look at enrollment figures from 20 years ago and the most recent enrollment figures available, reveals that total enrollment in women's colleges (including men) rose by 35 percent between 1976 and 1993, as compared to a 30 percent rise in total enrollment for all institutions of higher education. In that period, enrollment in women's colleges followed a pattern similar to that in all institutions of higher education. Table 3.4 and figures 3.2a and 3.2b show that enrollment in both kinds of institutions increased between 1976 and 1983, decreased slightly between 1983 and 1985, and then increased again between 1985 and 1993.

It is interesting to note that the numbers of women attending women's colleges has grown at a slower rate (32 percent) than the numbers of women attending all institutions of higher education (52 percent), when comparing data from 20 years ago, and 1993 enrollment data (table 3.5). But this is reflective of increasing numbers of women attending 2-year and public institutions compared to twenty years ago. Over the past few decades, accessibility to higher education for both men and women has increased due to the growth of community colleges and low-cost institutions, and increases in federal student financial aid and other aid programs.[8] The American higher education community has seen what one researcher has described as a "changing student demography," which includes the fact that the majority of college students are women; that students over age 25 constitute a sizable proportion of the student body; and that students from minority groups such as blacks, Hispanics, and Asians are emerging as a new student majority on some campuses.[9] There have also been increases in students attending higher education institutions on a part-time basis. Some overall trends in higher education enrollment pattern, and how they have been reflected at women's colleges follow.

Changing Enrollment Patterns

Older undergraduate women students. The increase in the number of older students on American campuses has been well documented. NCES notes that the "number of older students has been growing more rapidly than the number of younger students. Between 1980 and 1990, the enrollment of students under age 25 increased by 3 percent. During the same period, enrollment of persons 25 and over rose by 34 percent."[10] For the purposes of this report, we focused on the enrollment of undergraduate women by age during the early 1990s, to see if undergraduate women students beyond the traditional age contributed to the current increases in enrollment at women's colleges. Table 3.6 shows that all of the enrollment increases for undergraduate women at women's colleges came from students between the ages of 25 and 64. The number of women aged 18 to 24 (and even under 18) has declined during this period, while the number of women between the ages of 25 and 64 has increased (table 3.6).[11]

Figure 3.3—Percent growth in female enrollment at women's colleges and all institutions of higher education between Fall 1976 and Fall 1993.



Note: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

Source: U.S. Department of Education, PLLI.

Despite the trend toward older students identified by NCES and our analysis, women in their late teens and early 20s still made up the majority of undergraduate women on college campuses at both women's colleges (61percent) and at all institutions of higher education (57 percent) in Fall 1993. Women in their late 20s made up 9 percent of the undergraduate student body at women's colleges; 15 percent were between the ages of 30 and 39; and 13 percent were aged 40 to 64. Comparable figures for all institutions of higher education were 11 percent aged 25 to 29; 16 percent aged 30 to 39; and 11 percent aged 40 to 64 (table 3.6).

Minority women. The past two decades have seen increases in higher education students who are members of minority racial/ethnic groups. From NCES: "In 1976, 15.7 percent were minorities, compared with 23.4 percent in 1993. Much of the change can be attributed to rising numbers of Hispanic and Asian students. The proportion of students who were black has fluctuated over the past 15 years, rising to 10.2 percent in 1993."[12] Like other higher education institutions, women's colleges have a more racially diverse student population today than in the past.

Over the last two decades, women's colleges have been steadily increasing their enrollment of minority women. Since the actual numbers of minority women attending women's colleges are a very small percentage of the millions of students attending higher education, it is best to illustrate the effect of minority women on enrollment at women's colleges by examining their numbers as a percentage of the **growth** in enrollment. Minority women constitute a large percentage of the growth of enrollment of women at women's colleges. Figure 3.3 illustrates analysis of data presented in table 3.7, which shows that 51 percent of the growth in women's enrollment at women's colleges between 1976 and 1993 came from white women, 44 percent of the growth came from minority women (black, Hispanic, Asian, and American Indian) and five percent was from nonresident aliens (students who are not residents of the United States and who are in this country on a temporary basis).

In contrast, at all institutions of higher education, more of the growth in enrollment came from white women (59 percent), compared to 37 percent from minority women and four percent from nonresident aliens (figure 3.3). When minority enrollment at all women's colleges is compared to minority enrollment at all institutions of higher education, it is most notable that Hispanic, Asian, and American Indian women are still somewhat underrepresented in women's colleges on a proportional basis. However, it is important to remember, when comparing women's colleges with the larger universe of higher education institutions, that the general population of higher education institutions includes community colleges and special mission institutions that serve minorities (table 3.7).

Enrollment at women's colleges other than Historically Black women's colleges include higher proportions of black women, increasing the diversity of the student bodies at these colleges. The most notable trend in enrollment at women's colleges was the rising numbers of black women attending these colleges over almost the last two decades (an almost 74 percent increase). Two women's colleges, Bennett College of North Carolina and Spelman College of Georgia, are included under the category of Historically Black Colleges and Universities (HBCUs). While enrollments at Bennett and Spelman increased between 1976 and 1993, the enrollment of black women at these colleges decreased as a percentage of black women enrolled at all women's colleges. Black women enrolled at Bennett and Spelman made up close to one-quarter of the black women enrolled at women's colleges in 1976; this decreased to 20 percent in 1993 (tables 3.7, 3.8).

Part-time Students. For most of the past two decades, increases in the number of women in higher education have been fuelled by part-time students. As with female minority students, the impact of female part-time students at women's colleges is best illustrated by charting their percentage of growth in enrollment. At all institutions of higher education, part-time students made up a larger percentage of growth in enrollment of women (54 percent) than full-time students (figure 3.3, table 3.5). Part-time students comprised 37 percent of enrollment of women at women's colleges in 1993 (up from almost 22 percent in 1976). However, analysis of data presented in table 3.5 (illustrated in figure 3.3) shows that they accounted for over 87 percent of the growth in female enrollment at women's colleges between 1976 and 1993. In contrast, full-time students, accounting for 63 percent of enrollment of women at women's colleges in 1993 (down from 78 percent in 1976) made up only 13 percent of the increase in female enrollment at women's colleges over almost the past two decades (figure 3.3, table 3.5, appendix table 4).

Enrollment Trends Summary

Between the mid-1970s and the early 1990s, total enrollment at women's colleges increased, closely tracking the increasing enrollments at all institutions of higher education. Like the average institution of higher education, the average women's college studied for this report had increasing enrollments fuelled by more part-time students, attendance of older women, and growing racial and ethnic diversity.

A "Snapshot" of Women's Colleges in 1993

Enrollment for Fall 1993

The previous section of this chapter looked at enrollment trends for women's colleges, comparing data from 20 years ago with Fall 1993 data. This section will provide a "snapshot" of women's colleges in 1993. As stated earlier in this chapter, women's colleges are legally only all-female at the undergraduate level, so analysis of enrollment data and completions data in the rest of this chapter will focus on undergraduate women and bachelor's degree completion. Comparisons of women's colleges with similar institutions will ascertain if women's colleges do indeed provide better access to higher education for older undergraduate women students, minority women students, and part-time students, proportionally more women students choosing to pursue science and mathematics, and more women in leadership roles throughout the campus.

In order to enhance the accuracy of this snapshot of women's colleges in 1993, it is vital that the institutional type and control of these colleges be studied closely. There are only 2 public 4-year women's colleges included in this chapter, and there were no public 2-year women's colleges granting degrees in 1993 (Santa Monica College opened a public 2-year women's college in the Fall of 1993 that is not degree granting.) The number of private 2-year women's colleges that have retained their institutional mission of serving women for the past two decades has declined since 1976. Of the 76 institutions studied in this chapter, five women's colleges that were 2-year institutions began to confer bachelor's degrees and became 4-year colleges between Fall 1976 and Fall 1993. Therefore, in order to allow for the most valid comparisons, only women's colleges that were private 4-year women's colleges in 1993 will be compared to similar private 4-year institutions. These private 4-year women's colleges will then be divided into categories based on the most recent Carnegie classifications.[13]

Four Carnegie classifications encompass the great majority (64 of 66) of the private 4-year women's colleges (table B).[14] Table B shows that the women's colleges in the Baccalaureate I category tend to be among the more well-known of these institutions, the remaining women's colleges of the seven sisters, such as Smith, Wellesley, Bryn Mawr, Barnard and Mount Holyoke, as well as Spelman and Scripps. Surprisingly, the majority of women's colleges are in the Baccalaureate II category, despite the long history of most women's colleges being categorized as "liberal arts." While there are smaller numbers of women's colleges in the Master's I and Master's II categories, the enrollment of women at these schools constitute a sizeable portion of the total female enrollment at all private 4-year institutions in these categories.

Baccalaureate I Institutions. These institutions are primarily undergraduate colleges with major emphasis on bachelor's degree programs and award 40 percent or more of their bachelor's degrees in liberal arts fields. Eighteen private 4-year women's colleges are in this category, making up over 11 percent of all private 4-year institutions in this category. Female undergraduate enrollment at women's colleges was 20,700 in Fall 1993, 16 percent of all undergraduate women at Baccalaureate I schools (table 3.9).

Text Table B— Private 4-year Women's Colleges, by Carnegie Classification: Fall 1993

Baccalaureate I **(Institutions with an emphasis on bachelor's degree programs, award 40 percent or more of their bachelor's degrees in liberal arts fields.)**	**Baccalaureate II** **(Institutions with an emphasis on bachelor's degree programs, award less than 40 percent of their bachelor's degrees in liberal arts fields.)**	
Agnes Scott College Barnard College Bryn Mawr College Chatham College College of Saint Benedict Hollins College Judson College Mills College Mount Holyoke College Randolph-Macon Woman's College Salem College Scripps College Smith College Spelman College Sweet Briar College Wellesley College Wells College Wesleyan College	Alverno College Bennett College Blue Mountain College Carlow College Cedar Crest College College of Our Lady of the Elms College of Saint Elizabeth College of Saint Mary Columbia College Endicott College Lasell College Mary Baldwin College Marymount College Marymount Manhattan College Midway College	Mount Mary College Mount Vernon College Notre Dame College of Ohio Pine Manor College Regis College Rosemont College Saint Mary-of-the-Woods College Saint Mary's College (IN) Seton Hill College Stephens College Trinity College (VT) Ursuline College William Woods College Wilson College
Master's I **(These institutions are committed to graduate education through the master's degree. They award 40 or more master's degrees in 3 or more disciplines.)**		**Master's II** **(These institutions are committed to graduate education through the master's degree. They award 20 or more master's degrees in 1 or more disciplines.)**
Brenau University College of New Rochelle Converse College Emmanuel College Georgian Court College Hood College Immaculata College	Lesley College Meredith College Russell Sage College Main Campus Saint Joseph College Simmons College Trinity College (DC)	Chestnut Hill College College of Notre Dame Maryland College of Saint Catherine Mount Saint Mary's College

NOTE: "Private 4-year women's colleges" refers to 64 private 4-year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, IPEDS "Institutional Characteristics" survey, unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI). Information on Carnegie classifications from The Carnegie Foundation for the Advancement of Teaching, *A Classification of Institutions of Higher Education.* (Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching, 1994).

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Baccalaureate I women's institutions enrolled a higher proportion of female undergraduates aged 25 and over than at all private 4-year institutions in this category. Women's colleges in this category also enrolled a higher proportion of black, Hispanic, Asian, and nonresident alien women students than all private 4-year institutions in this category. However, the higher proportion of black female undergraduates can be attributed to Spelman College, a Historically Black College. Analysis of data on attendance status reveals that proportionally fewer female undergraduates in this category attended women's colleges on a part-time basis, compared to all private 4-year institutions in this category (tables 3.10, 3.11, and 3.12).

Baccalaureate II Institutions. These institutions are primarily undergraduate colleges with major emphasis on bachelor's degree programs; however, they award less than 40 percent of their bachelor's degrees in liberal arts fields. There are approximately 380 private 4-year colleges in this category, 29 of them, or almost 8 percent, are women's colleges. The women's colleges in this category had a total female undergraduate enrollment of 29,500 in Fall 1993. This was almost 10 percent of the total female undergraduate enrollment for private 4-year institutions in this category (table 3.9).

Women's colleges in the Baccalaureate II category had a higher proportion of female undergraduates age 25 and over, and a higher proportion of female undergraduates who were attending college part-time than all private 4-year institutions in this category (tables 3.10 and 3.12). Women's colleges in this category had lower proportions of minority female undergraduates (with the exception of Asian female undergraduates) than all private 4-year institutions in this category. These proportions were even lower when enrollment data for Bennett College, a Historically Black College, were excluded (tables 3.10, 3.11, and 3.12).

Master's I Institutions. These institutions offer a full range of bachelor's degree programs and are committed to graduate education through the master's degree. They award 40 or more master's degrees annually in three or more disciplines. Thirteen private 4-year women's colleges are in this category. They represent 7 percent of the 182 private 4-year institutions in this category. Women's colleges in this category had a total female undergraduate enrollment of almost 20,300 in Fall 1993, 7 percent of the total female undergraduate enrollment of all private 4-year institutions in this category (table 3.9).

Under this category, women's colleges enrolled a higher proportion of female undergraduates aged 25 and over, black female undergraduates, and female undergraduates attending school part-time than all private 4-year institutions in this category. Women's colleges enrolled similar or smaller proportions of minority women, other than black women, compared to all private 4-year Master's I institutions (tables 3.10, 3.11, and 3.12).

Master's II Institutions. These institutions offer a full range of bachelor's degree programs and are committed to graduate education through the master's degree. They award 20 or more master's degrees annually in one or more disciplines. There are only 66 private 4-year institutions in this category. Out of those, only 4 institutions or 6 percent are women's colleges, yet they enroll 6,500 undergraduate women, over 8 percent of the female undergraduates in this category (table 3.9).

Women's colleges in the Master's II category enrolled a higher proportion of undergraduate females who were aged 25 and over, black or Asian, and part-time students, than at all private 4-year institutions in this category (tables 3.10, 3.11, and 3.12).

Enrollment summary. On the whole, examination of Fall 1993 data by Carnegie classification does reveal age diversity in the undergraduate female population at women's colleges that is above average for private 4-year institutions. Also, women's colleges, in three of the four Carnegie classifications examined, have above-average proportions of female undergraduate students attending college part-time. A larger proportion of black women attend women's colleges as undergraduates in the Baccalaureate I, Master's I, and Master's II categories, and there is a larger proportion of Asian women in women's colleges under the Baccalaureate I, Baccalaureate II, and Master's II categories than the average for all private 4-year institutions in those categories. But Hispanic women are underrepresented in women's colleges in 3 of the 4 categories, and the small proportions of American Indian women at women's colleges are equal to or less than their proportions at all private 4-year institutions in each category.

Degrees Conferred Upon Women by Women's Colleges 1992–93

As can be expected, degrees conferred upon women at women's colleges are a very small proportion of all degrees in the U.S. Enrollment at women's colleges is under one percent of all enrollment in U.S. higher education institutions. Similarly, for 1992–93, the most recent year for which data were available for this report, about one percent of all degrees conferred were at women's colleges—about 25,000 degrees out of the over 2 million degrees conferred at all institutions.[15] Women were the majority of degree recipients at the associate, bachelor's, and master's level at all institutions of higher education, as they were at women's colleges for 1992–93, and a majority (16,000) of the degrees conferred upon women by women's colleges were bachelor's degrees (table 3.13).

Bachelor's Degrees Conferred Upon Women by Women's Colleges: 1992–93

In the two previous chapters we saw that in years past, the emphasis was on educating women to be knowledgeable wives and mothers, and to fulfill societal needs in teaching and other areas requiring a college education, but offering low prestige and pay. Recent decades have seen more career fields opening up to women, and women are taking advantage of these opportunities. However, according to the National Science Foundation (NSF): "Women have lower representation in science and engineering fields than in non-science and engineering fields."[16] As no women's colleges have accredited engineering programs (some do give out degrees in engineering as a part of joint programs with other institutions) this report will focus on science fields. Science is defined by NSF as encompassing the following fields: physical sciences, earth atmospheric and ocean sciences (IPEDS includes this category under physical sciences) mathematics, computer sciences, agricultural sciences, biological sciences, psychology, and social sciences (agricultural economics, anthropology, economics, geography, linguistics, political science, sociology, and anthropology). NSF notes that women do obtain the majority of bachelor's degrees in psychology, the social sciences, and biological sciences, but are underrepresented in some fields of a subcategory of science that they define as the natural sciences, (which in addition to biological sciences are physical sciences, mathematics, computer science, and agricultural science), as well as engineering.[17]

NSF has identified some women's colleges as producers of above average numbers of women graduates in science and engineering fields. NSF analysis of 1990–91 IPEDS data found

Spelman College to be number one of all institutions of higher education to confer bachelor's degrees in science to black women.[18] Also, NSF analysis of data on women who received doctor's degrees in science and engineering from 1988 through 1992 examined where these women had received their bachelor's degrees. Of the top 50 institutions of higher education that were the origin of bachelor's degrees for this group, four were women's colleges (Wellesley, Smith, Mount Holyoke, and Bryn Mawr.)[19]

What can we learn about the bachelor's degrees awarded to women at women's colleges in various fields of study, when we examine them according to the Carnegie classifications, and compare them to similar institutions?

Baccalaureate I institutions. The 18 women's colleges under this category conferred over 4,900 bachelor's degrees upon women in 1992–93 out of almost 30,000 bachelor's degrees conferred upon women by all private 4-year institutions in this category. Table 3.14 shows that a higher proportion of female bachelor's degree recipients at women's colleges were awarded degrees in mathematics, computer and information sciences, and the physical sciences than at all private 4-year institutions in this category. Most of these differences were less than one percent. Other fields in which women were receiving a higher proportion of bachelor's degrees than at all private 4-year institutions classified as Baccalaureate I include: area, ethnic and cultural studies, social sciences and history, and visual and performing arts. Most of these differences ranged from one to five percent.

Baccalaureate II institutions. The 29 women's colleges in this category conferred almost 4,800 bachelor's degrees upon women in 1992–93 of the 46,000 bachelor's degrees conferred upon women by all private 4-year institutions in this category. Table 3.15 shows that the proportions of women at women's colleges who were awarded bachelor's degrees in biological sciences, mathematics, and physical sciences were similar to those conferred upon women at all private 4-year institutions in this category. A higher proportion of bachelor's degrees were awarded to women at women's colleges in the following fields: agricultural sciences, communications, psychology, public administration and services, social sciences and history, health professions and related sciences, and visual and performing arts. Again, most of these differences were under five percent. All private 4-year institutions conferred upon women larger proportions of bachelor's degrees in the fields of education and business management and administrative services than women's colleges in this category.

Master's I institutions. The 13 women's colleges in this category conferred approximately 3,800 bachelor's degrees in 1992–93 upon women of the almost 52,000 bachelor's degrees conferred upon women by all private 4-year institutions in this category. Table 3.16 shows that women at women's colleges were awarded a higher proportion of bachelor's degrees than women at all private 4-year institutions in this category in mathematics, as well as in the following fields: education, health professions and related sciences, home economics, liberal arts, biological sciences, public administration and services, social sciences and history, and visual and performing arts, with the largest differences being in liberal arts and in education. All private 4-year institutions conferred proportionally more bachelor's degrees upon women in communications and in business management and administrative services than women's colleges in this category.

Master's II institutions. There were only four women's colleges in this category, and they conferred approximately 1,100 of the almost 12,000 bachelor's degrees conferred upon women

at private 4-year institutions in this category in 1992–93. Table 3.17 shows that the proportions of women at women's colleges and women at all private 4-year institutions in this category who received bachelor's degrees in mathematics were identical. Science fields in which women at women's colleges were awarded a larger proportion of bachelor's degrees than women at all private 4-year institutions in this category were computer sciences, physical sciences, and biological sciences, other fields included the following: English language and literature/letters, multi/ interdisciplinary studies, health professions and related sciences, and public administration and services. All private 4-year colleges conferred proportionally more bachelor's degrees upon women in business management and administrative services in this category.

Bachelor's degree summary. Examination of completions data for 1992–93, by Carnegie classification, shows that women's colleges did confer similar or higher proportions of bachelor's degrees in fields in which women have been identified as being "underrepresented" by NSF. However, examination of the degree data across Carnegie classifications reveals that there were large proportions of health science degrees conferred by women's colleges. Under the Baccalaureate II, Master's I, and Master's II categories, health professions and related sciences was a popular field for women at women's colleges. In each of these three categories, the proportion of women obtaining bachelor's degrees in health professions and related sciences was larger than the proportion of bachelor's degrees conferred upon women in this field at all private 4-year institutions in each category.

Other Degrees Conferred Upon Women by Women's Colleges

The above section of this chapter focused on data on bachelor's degrees as women's colleges award mostly bachelor's degrees, most often from the private 4-year colleges in the above-mentioned Carnegie classifications. However, data on graduate degrees and associate degrees awarded by all women's colleges are worth noting briefly, and it is most interesting to examine these data over time.

Master's degrees conferred upon women by all women's colleges increased by a larger percentage than master's degrees conferred upon women at all institutions of higher education. In 1992–93, a little over 4,600 master's degrees were awarded to women at all women's colleges, an 85 percent increase from the 2,500 master's degrees awarded in 1976–77. By comparison, the numbers of master's degrees conferred upon women at all institutions of higher education was over 200,000, up from 149,000 in 1976–77, a 34 percent increase (table 3.18).

Few women's colleges confer Doctor's degrees. Of the 16,000 Doctor's degrees conferred upon women in 1992–93, only 124 went to graduates of women's colleges (table 3.18). According to unpublished IPEDS data, Texas Woman's University accounted for 92 of these degrees, 74 percent of the total. Only four other women's colleges, Bryn Mawr College, Smith College, Simmons College, and Lesley College, conferred doctor's degrees.

As a final note on degree completion at women's colleges, it is interesting to look at trends in associate degrees. As stated earlier in this chapter, between 1976–77 and 1992–93, some 2-year women's colleges became 4-year colleges and chose to emphasize bachelor's degrees. Hence, it is not surprising that associate degrees conferred upon women by women's colleges in

academic year 1992–93 represented a 43 percent decline from 1976–77. In contrast, during that same period, almost 303,000 associate degrees were conferred upon women at all institutions of higher education, a 55 percent increase from 1976–77 (table 3.18).

Staffing at Women's Colleges

Analysis of enrollment and degree data have shown that female students are a growing force on American college campuses. But are women also a significant part of faculty and staff? Institutions with a mission of advancing women, such as women's colleges, would be expected to be especially concerned with the numbers of women in professional and faculty positions on their own campuses. In their promotional materials, women's colleges offer the promise of women in positions of leadership as "role models" for younger women at women's colleges. For example, one booklet notes that: "Students benefit from an atmosphere in which over half of the tenured faculty are women, and women are well-represented in the administration."[20] But how do women's colleges overall compare with similar institutions of higher education when it comes to the numbers of women in professional positions? As a part of the faculty? Once again, analyzing private 4-year women's colleges by Carnegie classification allows for the best comparisons of staffing at these women's colleges and at similar institutions.

Table 3.19 presents 1993 staffing data which were the most recent data released as of the writing of this report. This table shows that women at women's colleges in all four of the Carnegie classifications studied for this report made up the majority of full-time faculty, ranging from about 54 percent at Baccalaureate I institutions to over 68 percent at Master's II institutions. Women are overwhelmingly in the majority in professional administrative positions at women's colleges. They hold over 70 percent of the executive/administrative/managerial positions at women's colleges in the Baccalaureate I, Baccalaureate II, and Master's I categories, and close to 85 percent of such positions at women's colleges in the Master's II category.

The data on women in professional positions at women's colleges is in stark contrast to the data on women at all private 4-year institutions. In every one of the four Carnegie classifications, women constitute less than half of the executive/administrative/managerial staff, and less than 42 percent of the full-time faculty (table 3.19).

Overall, there is overwhelming evidence that there are more women in professional positions at women's colleges than at similar institutions of higher education. Thus, there are more women available as possible role models for female students.

One additional area of interest is full-time faculty of both sexes as a percent of total faculty. Recent research on postsecondary faculty has identified a growing trend of part-time faculty playing a larger role on campuses across the country.[21] There is evidence that women's colleges are a part of that trend. Women's colleges have smaller, or at best only slightly larger percentages of full-time faculty on campus than all private 4-year institutions in all of the four categories. Most notable are women's colleges in the Master's I category, in which full-time faculty make up only 37 percent of the total faculty (table 3.19).

Faculty Salaries at Women's Colleges

In addition to hiring more women as full-time faculty compared to similar institutions, women's colleges also pay female full-time faculty higher salaries. However, there is still a "gender gap" regarding salaries for full-time faculty at women's colleges, as exists at similar institutions. For this report, average salaries of full-time faculty were studied.[22]

Faculty salaries: Women's colleges compared to other institutions. For the most part, full-time faculty had higher average salaries at women's colleges than at all private 4-year colleges in each category. At women's colleges, in all four Carnegie classifications, female full-time faculty had a higher average salary than the average for all private 4-year colleges in that category. Male full-time faculty only had a higher average salary at women's colleges when compared with similar institutions in the Baccalaureate II and Master's II categories.

Faculty salaries: Gender equity at women's colleges. Gender equity regarding faculty salaries is an area of concern in the higher education community. NCES found that: "Average salaries for men in 1993-94...were considerably higher than the average for women.. and have increased at a slightly faster rate since 1980-81."[23] The American Council of Education has noted that: "The earnings gap remains a key issue for women today and further studies must be conducted on the pay equity issue to determine what barriers preclude women from receiving equitable pay and what are the most effective mechanisms for addressing equitable compensation."[24]

As is the pattern at all institutions of higher education, male full-time faculty at women's colleges tend to have higher average salaries.[25] However, there was less of a difference between males and females regarding average salaries for full-time faculty at women's colleges than at all private 4-year institutions in each of the four Carnegie classifications studied. Women's colleges in the Baccalaureate I category had the greatest discrepancy between average faculty salaries for male and female full-time faculty (over $6,000), while Baccalaureate II category women's colleges had the smallest discrepancy (a little over $2,000) (table 3.20).

Conclusion

Today, women's colleges are a small, but highly visible segment of the universe of American higher education institutions. The women's colleges that have survived the last two turbulent decades in higher education seem to be thriving with larger enrollments and more diverse student bodies than before. Enrollments at women's colleges are more racially and ethnically diverse today than during the 1970s. Between the mid-1970s and the early 1990s, increases in enrollment at women's colleges were clearly fuelled by women attending part-time, and the 1990s have seen increases in undergraduate enrollment fuelled by women over age 25. Analysis of Fall 1993 data show that when compared with similar institutions, women's colleges have more female undergraduates aged 25 and over, more part-time students, and in some cases, more minority women on campus.

Examination of bachelor's degrees conferred upon women at women's colleges, as compared with similar institutions, shows evidence that women's colleges are graduating similar or larger proportions of women in fields in which they have been historically underrepresented

such as physical sciences, computer sciences, and mathematics. However, for the most part, women's colleges are granting large proportions of bachelor's degrees to women in health fields.

There are more women in professional positions at women's colleges than at similar institutions of higher education. Women accounted for over 70 percent of the executive, administrative, and managerial staff at women's colleges, and well over half of the full-time and part-time faculty. However, average salaries for full-time female faculty at women's colleges range from $2,000 to $6,000 lower than their male counterparts. But, the gap in average salaries male and female full-time faculty is narrower at women's colleges than at all private 4-year institutions in each Carnegie classification.

This chapter has provided an overview of institutional characteristics, enrollment, degrees awarded, staffing, and faculty salaries at women's colleges as they enter the 21st century. This chapter also provided a unique view of women's colleges compared with similar institutions by Carnegie classification. In this comparison, these data presented a picture of institutions dedicated to women's education that are enrolling a higher proportion of older women, minority women, and part-time students than their Carnegie classification counterparts. They also show a dramatic difference in the proportions of female professional staff, when compared with similar institutions. Differences in women graduating in traditionally male-dominated fields, however, were less dramatic. It is hoped that this information will provide not only some valuable data for the American education community, but will also be a starting point for future works of research in the area of women's colleges.

Table 3.1—Number and percent of institutions by size of enrollment, all institutions of higher education, and women's colleges: Fall 1993

Size of enrollment	All institutions		Women's colleges	
	Number	Percent	Number	Percent
Total*	3,546	100.0	76	100.0
Under 200	363	10.2	1	1.3
200 to 499	457	12.9	12	15.8
500 to 999	482	13.6	18	23.7
1,000 to 2,499	849	23.9	33	43.4
2,500 to 4,999	538	15.2	9	11.8
5,000 to 9,999	449	12.7	3	3.9
10,000 to 19,999	283	8.0	0	0.0
20,000 to 29,999	95	2.7	0	0.0
30,000 or more	30	0.8	0	0.0

*Count of institutions may differ from other tables due to the way institutions count branch campuses, also due to whether the institution reported enrollment.

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. Enrollment includes students at all levels.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1995, and the Integrated Postsecondary Education Data System (IPEDS) "Institutional Characteristics" survey, unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.2—Number and percent of institutions by affiliation, all institutions of higher education, and women's colleges: Fall 1993

Religious/control affiliation	All institutions		Women's colleges	
	Number	Percent	Number	Percent
Total*	3,550	100.0	76	100.0
Catholic	251	7.1	25	32.9
Protestant	683	19.2	14	18.4
Independent	709	20.0	35	46.1
For-profit	313	8.8	0	0.0
Public	1,594	44.9	2	2.6

*Count of institutions may differ from other tables due to the way institutions count branch campuses, also due to whether the institution reported enrollment.

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1995, and Integrated Postsecondary Education Data System (IPEDS) "Institutional Characteristics" survey, unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.3—Number and percent of institutions and fall enrollment in women's colleges and all institutions of higher education, by region: 1993

Region	Number of institutions	Percent of institutions	Enrollment	Percent of institutions
	Women's colleges			
Total	76	100.0	118,880	100.0
Northeast	36	47.4	62,081	52.2
South	25	32.9	36,703	30.9
Midwest	12	15.8	16,847	14.2
West	3	3.9	3,249	2.7
	All institutions			
Total*	3,632	100.0	14,305,658	100.0
Northeast	853	23.5	2,850,791	19.9
South	1,166	32.1	4,555,989	31.8
Midwest	955	26.3	3,572,601	25.0
West	658	18.1	3,326,277	23.3

*Count of institutions may differ from other tables due to the way institutions count branch campuses, also due to whether the institution reported enrollment.

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. Enrollment includes students at all levels.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Characteristics of the Nation's Postsecondary Institutions: Academic Year 1993–94; Enrollment in Higher Education: Fall 1984 Through Fall 1993; Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.4—Enrollment at women's colleges and all institutions of higher education: Fall 1976–Fall 1993

Fall	Total enrollment	
	Women's Colleges	All institutions
1976	88,352	11,012,137
1977	90,139	11,285,787
1978	91,191	11,260,092
1979	94,523	11,569,899
1980	97,524	12,096,895
1981	99,499	12,371,672
1982	99,635	12,425,780
1983	102,069	12,464,661
1984	101,430	12,241,940
1985	99,950	12,247,055
1986	102,396	12,503,511
1987	103,159	12,766,642
1988	106,722	13,055,337
1989	109,448	13,538,560
1990	112,569	13,818,637
1991	113,407	14,358,953
1992	116,591	14,486,315
1993	118,880	14,305,658
Years		Percent change
1976–1993	34.6	29.9
1992–1993	2.0	–1.2

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. Enrollment includes students at all levels.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1995*, "Fall Enrollment in Higher Education Survey," and Integrated Postsecondary Education Data System (IPEDS) "Fall enrollment" survey, various years, unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.5—Enrollment of women at women's colleges and all institutions of higher education, by attendance status: Fall 1976 and Fall 1993

Enrollment	Total	Full-time	Part-time	Part-time as a percent of total enrollment
			Fall 1976	
Women at women's colleges	82,907	64,768	18,139	21.9
Total at women's colleges	88,352	67,803	20,549	23.3
Women as a percent of total	93.8	95.5	88.3	—
Women at all institutions	5,201,309	3,013,433	2,187,876	42.1
Total at all institutions	11,012,137	6,717,058	4,295,079	39.0
Women as a percent of total	47.2	44.9	50.9	—
			Fall 1993	
Women at women's colleges	109,047	68,234	40,813	37.4
Total at women's colleges	118,880	72,080	46,800	39.4
Women as a percent of total	91.7	94.7	87.2	—
Women at all institutions	7,877,942	4,237,137	3,640,805	46.2
Total at all institutions	14,305,658	8,127,740	6,177,918	43.2
Women as a percent of total	55.1	52.1	58.9	—
			Percent change	
Women at women's colleges	31.5	5.4	125.0	—
Women at all institutions	51.5	40.6	66.4	—

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. Enrollment includes students at all levels.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1995; "Fall Enrollment in Higher Education Survey," and Integrated Postsecondary Education Data System (IPEDS) "Fall enrollment" survey, various years, unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.6—Enrollment of undergraduate women at women's colleges and all institutions of higher education, by age: Fall 1989 and Fall 1993

	Total	Under 18	18–24	25–29	30–39	40–64	65 and over	Unidentified
	Fall 1989							
Undergraduate women at women's colleges	86,131	1,746	56,913	7,226	11,510	8,474	262	0
Percent undergraduate women at women's colleges	100.0	2.0	66.1	8.4	13.4	9.8	0.3	0.0
	Fall 1993							
Undergraduate women at women's colleges	90,699	1,575	55,435	8,410	13,486	11,541	252	0
Percent undergraduate women at women's colleges	100.0	1.7	61.1	9.3	14.9	12.7	0.3	0.0
Undergraduate women at all institutions	6,840,277	146,639	3,898,967	772,107	1,113,987	757,854	44,323	106,400
Percent undergraduate women at all institutions	100.0	2.1	57.0	11.3	16.3	11.1	0.6	1.6
	Percent change							
Undergraduate women at women's colleges	5.3	–9.8	–2.6	16.4	17.2	36.2	–3.8	—

NOTE: Data on enrollment of undergraduate women by age for all institutions of higher education for 1989 not available for publication. Age unidentified students were estimated proportionally by institution. "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1995; Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" surveys; unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.7—Enrollment of women at women's colleges and all institutions of higher education, by race/ethnicity: Fall 1976 and Fall 1993

Enrollment	Total	White	Black	Hispanic	Asian	American Indian	Nonresident alien
	Fall 1976						
Women at women's colleges	82,907	70,658	7,636	1,757	801	446	1,609
Percent at women's colleges	100.0	85.2	9.2	2.1	1.0	0.5	1.9
Women at all institutions*	5,191,224	4,262,414	563,144	174,076	89,444	37,567	64,579
Percent at all institutions	100.0	82.1	10.8	3.4	1.7	0.7	1.2
	Fall 1993						
Women at women's colleges	109,047	84,048	13,268	4,441	4,032	385	2,873
Percent at women's colleges	100.0	77.1	12.2	4.1	3.7	0.4	2.6
Women at all institutions	7,877,942	5,847,742	867,369	547,581	361,104	70,537	183,609
Percent at all institutions	100.0	74.2	11.0	7.0	4.6	0.9	2.3
	Percent change						
Women at women's colleges	31.5	19.0	73.8	152.8	403.4	–13.7	78.6
Women at all institutions	51.8	37.2	54.0	214.6	303.7	87.8	184.3

*Totals for 1976 differ from other tables by approximately 10,000 due to students who did not identify by race. They were .2 percent of the 5.2 million female students enrolled in higher education.

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. Enrollment includes students at all levels.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1995; Fall Enrollment in Higher Education Survey," and Integrated Postsecondary Education Data System (IPEDS) "Fall enrollment" survey; unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.8—Enrollment of black women at Historically Black Women's Colleges and all women's colleges: Fall 1976 and Fall 1993

Fall	Black women at Bennett College	Black women at Spelman College	Total black women at Bennett and Spelman	Total black women at women's colleges	Black women at Bennett and Spelman as a percent of black women at women's colleges
1976	615	1,260	1,875	7,636	24.6
1993	645	2,010	2,655	13,268	20.0

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. Enrollment includes students at all levels.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Higher Education Survey," and Integrated Postsecondary Education Data System (IPEDS) "Fall enrollment" survey; unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.9—Female undergraduate enrollment at private 4–year women's colleges, and all private 4–year institutions, by Carnegie classification: Fall 1993

Enrollment	Baccalaureate I	Baccalaureate II	Master's I	Master's II
Undergraduate women at private 4–year women's colleges	20,710	29,507	20,280	6,547
Undergraduate women at all private 4–year institutions	130,269	307,746	292,403	76,677
Undergraduate women at private 4–year women's colleges as a percentage of all undergraduate women enrolled at all private 4–year institutions	15 9	9 6	6 9	8 5
	Number of institutions			
Number of private 4–year women's colleges	18	29	13	4
Number of private 4–year institutions	159	379	182	66
Private 4–year women's colleges as a percentage of all private 4–year institutions	11 3	7.7	7 1	6 1

NOTE: "Private 4–year women's colleges" refers to 64 private 4–year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data, tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.10—Distribution of undergraduate females by age at private 4–year women's colleges and all private 4–year institutions, by Carnegie classification: Fall 1993

Carnegie classification	Under 25	25 and over	Total
Baccalaureate I			
Private 4–year women's colleges	87.9	12.1	100.0
All private 4–year institutions	92.2	7.8	100.0
Baccalaureate II			
Private 4–year women's colleges	56.4	43.6	100.0
All private 4–year institutions	64.8	35.2	100.0
Master's I			
Private 4–year women's colleges	53.1	46.9	100.0
All private 4–year institutions	65.6	34.4	100.0
Master's II			
Private 4–year women's colleges	50.1	49.9	100.0
All private 4–year institutions	63.6	36.4	100.0

NOTE: "Private 4–year women's colleges" refers to 64 private 4–year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. Data for women's colleges estimated in order to include students not identified by age. Estimations were made based on proportions by institution. Students not identified by age for all private 4–year institutions were 2 percent for Baccalaureate I, 6 percent for Baccalaureate II, and 3 percent each for Master's I and Master's II.

SOURCE: U.S. Department of Education, National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data, tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.11—Distribution of undergraduate females by race/ethnicity at private 4–year women's colleges and all private 4–year institutions, by Carnegie classification: Fall 1993

Carnegie classification	White	Black	Hispanic	Asian	American Indian	Nonresident alien	Total
Baccalaureate I							
Private 4–year women's colleges	67.0	14.1	3.4	10.5	0.3	4.8	100.0
All private 4–year institutions	83.4	5.4	3.0	5.0	0.3	2.9	100.0
Baccalaureate II							
Private 4–year women's colleges	81.6	10.9	3.7	1.6	0.3	2.0	100.0
All private 4–year institutions	73.1	14.5	8.6	1.5	0.5	1.8	100.0
Master's I							
Private 4–year women's colleges	71.2	19.4	5.0	2.2	0.4	1.8	100.0
All private 4–year institutions	71.6	10.7	11.7	3.1	0.4	2.5	100.0
Master's II							
Private 4–year women's colleges	74.7	8.5	8.9	5.6	0.5	1.8	100.0
All private 4–year institutions	78.3	5.5	11.6	2.0	0.6	2.0	100.0
Excluding Spelman and Bennett*							
Baccalaureate I							
Private 4–year women's colleges	74.2	4.9	3.7	11.6	0.3	5.3	100.0
All private 4–year institutions	84.8	3.9	3.0	5.1	0.3	2.9	100.0
Baccalaureate II							
Private 4–year women's colleges	83.4	8.9	3.8	1.6	0.3	2.0	100.0
All private 4–year institutions	73.1	14.3	8.6	1.5	0.5	1.8	100.0

*Spelman College and Bennett College are Historically Black Colleges. Spelman had a Fall 1993 black female undergraduate enrollment of 2,010. It is a Baccalaureate I institution. Bennett had a Fall 1993 black female undergraduate enrollment of 645. It is a Baccalaureate II institution.

NOTE: "Private 4–year women's colleges" refers to 64 private 4–year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data, tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Table 3.12—Distribution of undergraduate females by attendance status at private 4–year women's colleges and all private 4–year institutions, by Carnegie classification: Fall 1993

Carnegie classification	Part-time	Full-time	Total
Baccalaureate I			
Private 4–year women's colleges	6.4	93.6	100.0
All private 4–year institutions	7.3	92.7	100.0
Baccalaureate II			
Private 4–year women's colleges	38.8	61.2	100.0
All private 4–year institutions	29.8	70.2	100.0
Master's I			
Private 4–year women's colleges	32.7	67.3	100.0
All private 4–year institutions	29.7	70.3	100.0
Master's II			
Private 4–year women's colleges	42.2	57.8	100.0
All private 4–year institutions	30.6	69.4	100.0

NOTE: "Private 4–year women's colleges" refers to 64 private 4–year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data, tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.13—Degrees awarded by women's colleges and by all institutions of higher education: 1992–93

Institution and graduates	Associates	Bachelor's	Master's	Doctor's	Total*
Degrees conferred upon all graduates					
All institutions	514,756	1,165,178	369,585	42,132	2,091,651
Women's colleges	2,572	16,717	5,459	151	24,899
Degrees conferred upon women graduates					
All institutions	302,792	632,297	200,327	16,059	1,151,475
Women's colleges	2,405	16,099	4,610	124	23,238
Degrees conferred upon women as a percent of all degrees conferred-all institutions	58.8	54.3	54.2	38.1	55.1
Degrees conferred upon women as a percent of all degrees conferred-women's colleges	93.5	96.3	84.4	82.1	93.3

*"Total" refers to associates, bachelor's, master's, and doctor's degrees, does not include first-professional degrees.

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. The data in this table include graduate degrees conferred upon 37,775 male and 17,833 female nonresident aliens at all institutions of higher education (less than 1 percent of these degrees were at women's colleges).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Completions" survey, unpublished data; Degrees and Other Awards Conferred by Institutions of Higher Education: 1992–93; Digest of Education Statistics, 1995; data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.14—Number and percent of bachelor's degrees awarded to women at private 4–year women's colleges and all private 4–year institutions classified as Baccalaureate I, by field: 1992–93

Fields	Number of degrees		Percent of degrees	
	All private 4–year institutions	Private 4–year women's colleges	All private 4–year institutions	Private 4–year women's colleges
Total	29,386	4,941	100.0	100.0
	Traditionally male-dominated fields			
Agricultural Sciences	3	0	(*)	0.0
Computer and Information Sciences	184	68	0.6	1.4
Engineering	76	4	0.3	0.1
Mathematics	581	133	2.0	2.7
Physical Sciences	770	147	2.6	3.0
	Other fields			
Agricultural Business and Production	1	0	(*)	0.0
Air Transportation Workers	0	0	0.0	0.0
Architecture and Related Programs	27	27	0.1	0.5
Area, Ethnic and Cultural Studies	873	261	3.0	5.3
Biological Sciences/Life Sciences	2,371	373	8.1	7.5
Business Management and Administrative Services	2,107	115	7.2	2.3
Communications	551	117	1.9	2.4
Communications Technologies	0	0	0.0	0.0
Conservation and Renewable Natural Resources	70	20	0.2	0.4
Education	1,508	107	5.1	2.2
Engineering-Related Technologies	0	0	0.0	0.0
English Language and Literature/Letters	3,708	584	12.6	11.8
Foreign Languages and Literatures	1,479	278	5.0	5.6
Health Professions and Related Sciences	432	50	1.5	1.0
Home Economics	88	11	0.3	0.2
Law and Legal Studies	20	1	0.1	(*)
Liberal Arts	881	79	3.0	1.6
Library Science	0	0	0.0	0.0
Marketing Operations and Distribution	66	0	0.2	0.0
Mechanics and Repair	0	0	0.0	0.0
Multi/Interdisciplinary Studies	598	154	2.0	3.1
Parks, Recreation, Leisure and Fitness	62	0	0.2	0.0
Philosophy and Religion	679	136	2.3	2.8
Precision Production	0	0	0.0	0.0
Protective Services	21	0	0.1	0.0
Psychology	3,213	533	10.9	10.8
Public Administration and Services	246	34	0.8	0.7
Science Technologies	0	0	0.0	0.0
Social Sciences and History	6,497	1,277	22.1	25.8
Theological Studies and Religious Vocations	38	3	0.1	0.1
Visual and Performing Arts	2,224	429	7.6	8.7
Vocational Home Economics	12	0	(*)	0.0
Field of study not designated	0	0	0.0	0.0

*Less than .05

NOTE: "Private 4–year women's colleges" refers to 18 private 4–year institutions classified as Baccalaureate I institutions and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Completions" survey, unpublished data, tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.15—Number and percent of bachelor's degrees awarded to women at private 4–year women's colleges and all private 4–year institutions classified as Baccalaureate II, by field: 1992–93

Fields	Number of degrees		Percent of degrees	
	All private 4–year institutions	Private 4–year women's colleges	All private 4–year institutions	Private 4–year women's colleges
Total	46,013	4,779	100.0	100.0
	Traditionally male-dominated fields			
Agricultural Sciences	70	12	0.2	0.3
Computer and Information Sciences	694	33	1.5	0.7
Engineering	85	2	0.2	(*)
Mathematics	543	57	1.2	1.2
Physical Sciences	323	33	0.7	0.7
	Other fields			
Agricultural Business and Production	57	8	0.1	0.2
Air Transportation Workers	5	0	(*)	0.0
Architecture and Related Programs	52	0	0.1	0.0
Area, Ethnic and Cultural Studies	75	17	0.2	0.4
Biological Sciences/Life Sciences	1,506	156	3.3	3.3
Business Management and Administrative Services	12,050	1,092	26.2	22.8
Communications	1,822	363	4.0	7.6
Communications Technologies	42	3	0.1	0.1
Conservation and Renewable Natural Resources	58	0	0.1	0.0
Education	8,048	550	17.5	11.5
Engineering-Related Technologies	78	0	0.2	0.0
English Language and Literature/Letters	1,880	231	4.1	4.8
Foreign Languages and Literatures	331	54	0.7	1.1
Health Professions and Related Sciences	4,217	505	9.2	10.6
Home Economics	263	80	0.6	1.7
Law and Legal Studies	178	41	0.4	0.9
Liberal Arts	2,070	47	4.5	1.0
Library Science	10	0	(*)	0.0
Marketing Operations and Distribution	274	51	0.6	1.1
Mechanics and Repair	0	0	0.0	0.0
Multi/Interdisciplinary Studies	444	87	1.0	1.8
Parks, Recreation, Leisure and Fitness	302	0	0.7	0.0
Philosophy and Religion	200	25	0.4	0.5
Precision Production	3	0	(*)	0.0
Protective Services	462	8	1.0	0.2
Psychology	3,377	380	7.3	8.0
Public Administration and Services	1,201	139	2.6	2.9
Science Technologies	2	0	(*)	0.0
Social Sciences and History	3,157	422	6.9	8.8
Theological Studies and Religious Vocations	327	14	0.7	0.3
Visual and Performing Arts	1,438	363	3.1	7.6
Vocational Home Economics	23	6	(*)	0.1
Field of study not designated	346	0	0.8	0.0

*Less than .05

NOTE: "Private 4–year women's colleges" refers to 29 private 4–year institutions, classified as Baccalaureate II institutions and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Completions" survey, unpublished data, tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Table 3.16—Number and percent of bachelor's degrees awarded to women at private 4–year women's colleges and all private 4–year institutions classified as Master's I, by field : 1992–93

Fields	Number of degrees		Percent of degrees	
	All private 4–year institutions	Private 4–year women's colleges	All private 4–year institutions	Private 4–year women's colleges
Total	51,763	3,786	100.0	100.0
	Traditionally male-dominated fields			
Agricultural Sciences	10	0	(*)	0.0
Computer and Information Sciences	715	13	1.4	0.3
Engineering	414	0	0.8	0.0
Mathematics	561	56	1.1	1.5
Physical Sciences	370	15	0.7	0.4
	Other fields			
Agricultural Business and Production	0	0	0.0	0.0
Air Transportation Workers	141	0	0.3	0.0
Architecture and Related Programs	131	25	0.3	0.7
Area, Ethnic and Cultural Studies	123	8	0.2	0.2
Biological Sciences/Life Sciences	1,755	165	3.4	4.4
Business Management and Administrative Services	13,252	622	25.6	16.4
Communications	3,264	98	6.3	2.6
Communications Technologies	67	0	0.1	0.0
Conservation and Renewable Natural Resources	29	0	0.1	0.0
Education	5,930	520	11.5	13.7
Engineering-Related Technologies	58	0	0.1	0.0
English Language and Literature/Letters	2,381	168	4.6	4.4
Foreign Languages and Literatures	517	43	1.0	1.1
Health Professions and Related Sciences	5,330	412	10.3	10.9
Home Economics	467	97	0.9	2.6
Law and Legal Studies	180	12	0.3	0.3
Liberal Arts	2,005	540	3.9	14.3
Library Science	0	0	0.0	0.0
Marketing Operation and Distribution	525	34	1.0	0.9
Mechanics and Repair	1	0	(*)	0.0
Multi/Interdisciplinary Studies	1,565	71	3.0	1.9
Parks, Recreation, Leisure and Fitness	236	0	0.5	0.0
Philosophy and Religion	263	20	0.5	0.5
Precision Production	10	10	(*)	0.3
Protective Services	483	13	0.9	0.3
Psychology	3,967	263	7.7	6.9
Public Administration and Services	1,023	95	2.0	2.5
Science Technologies	0	0	0.0	0.0
Social Sciences and History	3,757	313	7.3	8.3
Theological Studies and Religious Vocations	123	5	0.2	0.1
Visual and Performing Arts	2,076	168	4.0	4.4
Vocational Home Economics	34	0	0.1	0.0
Field of study not designated	0	0	0.0	0.0

*Less than .05.

NOTE: "Private 4–year women's colleges" refers to 13 private 4–year institutions, classified as Master's I institutions and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Completions" survey, unpublished data, tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.17—Number and percent of degrees awarded to women at private 4–year women's colleges and all private 4–year institutions classified as Master's II, by field: 1992–93

Fields	Number of degrees		Percent of degrees	
	All private 4–year institutions	Private 4–year women's colleges	All private 4–year institutions	Private 4–year women's colleges
Total	11,949	1,074	100.0	100.0
	Traditionally male–dominated fields			
Agricultural Sciences	1	0	(*)	0.0
Computer and Information Sciences	118	15	1.0	1.4
Engineering	12	0	0.1	0.0
Mathematics	129	12	1.1	1.1
Physical Sciences	70	7	0.6	0.7
	Other fields			
Agricultural Business and Production	21	0	0.2	0.0
Air Transportation Workers	0	0	0.0	0.0
Architecture and Related Programs	49	0	0.4	0.0
Area, Ethnic and Cultural Studies	0	0	0.0	0.0
Biological Sciences/Life Sciences	392	42	3.3	3.9
Business Management and Administrative Services	2,969	193	24.8	18.0
Communications	531	38	4.4	3.5
Communications Technologies	2	0	(*)	0.0
Conservation and Renewable Natural Resources	4	0	(*)	0.0
Education	1,600	144	13.4	13.4
Engineering-Related Technologies	2	0	(*)	0.0
English Language and Literature/Letters	641	98	5.4	9.1
Foreign Languages and Literatures	95	12	0.8	1.1
Health Professions and Related Sciences	1,691	195	14.2	18.2
Home Economics	56	7	0.5	0.7
Law and Legal Studies	19	0	0.2	0.0
Liberal Arts	392	0	3.3	0.0
Library Science	1	0	(*)	0.0
Marketing Operations and Distribution	114	7	1.0	0.7
Mechanics and Repair	0	0	0.0	0.0
Multi/Interdisciplinary Studies	140	40	1.2	3.7
Parks, Recreation, Leisure and Fitness	81	1	0.7	0.1
Philosophy and Religion	75	13	0.6	1.2
Precision Production	2	0	(*)	0.0
Protective Services	68	0	0.6	0.0
Psychology	854	83	7.1	7.7
Public Administration and Services	268	61	2.2	5.7
Science Technologies	3	0	0.0	0.0
Social Sciences and History	813	70	6.8	6.5
Theological Studies and Religious Vocations	35	0	0.3	0.0
Visual and Performing Arts	380	36	3.2	3.4
Vocational Home Economics	0	0	0.0	0.0
Field of study not designated	321	0	2.7	0.0

*Less than .05.

NOTE: "Private 4–year women's colleges" refers to 4 private 4–year institutions, classified as Master's II institutions and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Completions" survey, unpublished data, tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.18—Degrees conferred upon women by women's colleges and by all institutions of higher education, by level: 1976–77 and 1992–93

	Women's colleges					All institutions				
Year	Associates	Bachelor's	Master's	Doctor's	Total*	Associates	Bachelor's	Master's	Doctor's	Total*
1976–77	4,240	12,915	2,493	83	19,731	195,535	424,004	149,381	8,090	777,010
1992–93	2,405	16,099	4,610	124	23,238	302,792	632,297	200,327	16,059	1,151,475
Percent change	–43.3	24.7	84.9	49.4	17.8	54.9	49.1	34.1	98.5	48.2

*"Total" refers to associates, bachelor's, master's, and doctor's degrees; does not include first-professional degrees.

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. These data include graduate degrees conferred upon 4,350 female nonresident aliens at all institutions of higher education (less than 2 percent of these degrees were at women's colleges) in 1976–77 and 17,833 female nonresident aliens at all institutions of higher education (less than 1 percent of these degrees were at women's colleges) in 1992–93.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred," unpublished data; Integrated Postsecondary Education Data System (IPEDS) "Completions" survey, unpublished data; Degrees and Other Awards Conferred by Institutions of Higher Education: 1991–92; Degrees and Other Awards Conferred by Institutions of Higher Education: 1992–93; Digest of Education Statistics: 1995; data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.19—Number of staff and percent of female staff at private 4–year women's colleges and all private 4–year institutions, by occupational category and Carnegie classification: Fall 1993

Carnegie classification	Total staff		Total professional staff		Executive/ administrative/ managerial staff		Part-time faculty		Full-time faculty				Total faculty	
	Total	Women as a percent	Total	Women as a percent	Total	Women as a percent	Total	Women as a percent	Total	Women as a percent	Total Faculty	Full-time faculty as a percent of total faculty	Female faculty	Women as a percent of faculty
Baccalaureate I														
Private 4–year women's colleges	8,097	64.4	4,501	66.0	765	73.2	559	60.6	1,912	53.7	2,471	77.4	1,365	55.2
All private 4–year institutions	69,383	52.6	39,932	45.0	6,199	47.4	5,988	49.2	17,930	34.4	23,918	75.0	9,112	38.1
Baccalaureate II														
Private 4–year women's colleges	7,101	71.3	4,521	70.9	615	77.6	1,139	65.4	1,471	62.8	2,610	56.4	1,669	63.9
All private 4–year institutions	89,611	52.2	60,234	45.1	7,914	43.3	16,250	46.7	21,713	37.9	37,963	57.2	15,810	41.6
Master's I														
Private 4–year women's colleges	5,557	67.3	4,003	65.1	344	70.3	1,806	55.6	1,065	63.6	2,871	37.1	1,682	58.6
All private 4–year institutions	116,276	50.9	77,509	44.1	9,078	45.6	24,614	42.6	26,787	36.5	51,401	52.1	20,271	39.4
Master's II														
Private 4–year women's colleges	1,303	71.5	817	75.0	129	84.5	236	70.8	307	68.4	543	56.5	377	69.4
All private 4–year institutions	21,774	53.9	15,021	47.9	2,136	49.4	4,548	46.4	5,459	41.9	10,007	54.6	4,401	44.0

NOTE: "Private 4–year women's colleges" refers to 64 private 4–year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Staff" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Table 3.20—Average salaries of full-time faculty at private 4–year women's colleges and all private 4–year institutions, by sex and Carnegie classification: 1993–94

Carnegie classification	Men	Women
Baccalaureate I		
Private 4–year women's colleges	$46,855	$40,830
All private 4–year institutions	$47,097	$39,857
Baccalaureate II		
Private 4–year women's colleges	$34,698	$32,650
All private 4–year institutions	$33,336	$30,225
Master's I		
Private 4–year women's colleges	$40,945	$37,677
All private 4–year institutions	$42,509	$37,286
Master's II		
Private 4–year women's colleges	$36,564	$33,506
All private 4–year institutions	$36,181	$32,389

NOTE: Averages are weighted averages computed by the National Data Resource Center. These salaries are for faculty on 9– and 10–month contracts only. "Private 4–year women's colleges" refers to 64 private 4–year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Salaries, Tenure, and Fringe Benefits of Full-time Instructional Faculty" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Notes

1. *Institutions of higher education* are those that offer programs terminating in an Associate, Bachelor's, or higher level degree.

2. Comparisons will not be made to all-male colleges, as the author of this chapter could only identify 7 men's colleges in the U.S. which recently reported data independently to the U.S. Department of Education: The Citadel, Deep Springs College, Hampden-Sydney College, Morehouse College, Saint John's University (MN), The Virginia Military Institute, and Wabash College. Other men's colleges include Richmond College, Tulane College, and Hobart College which reported data to the U.S. Department of Education in conjunction with their coordinate all-female colleges.

3. Implemented in 1966, HEGIS was an annual universe survey which acquired and maintained statistical data on the characteristics and operations of accredited institutions of higher education. In 1986, HEGIS was replaced by IPEDS. Currently, IPEDS collects data on all institutions of higher education on an annual basis. IPEDS consists of six surveys: Institutional Characteristics; Fall Enrollment; Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty, Completions; Financial Statistics; and Staff.

4. The institutional mission of an institution of higher education is usually clearly stated in the first few pages of the college catalogue or other promotional materials put out by the institution. Some examples of women's colleges' institutional missions include this from p. 6 of the *Midway College Catalog 1995–1997:* "Unlike a coeducational institution, everything Midway College does is focused on the development and growth of women, helping them to pursue their personal and professional goals with self-assurance and distinction." Also, from p. 3 of the *Sweet Briar College Catalog 1994–1995:* "Sweet Briar is a four-year, independent college whose aim is to prepare women to be active, responsible members of a world community."

5. The seven colleges that were identified as women's colleges by the WCC, but omitted from this data analysis were: Newcomb College, Westhampton College, Douglass College, Hartford College for Women, and William Smith College which all reported data to HEGIS and IPEDS with the all-male or coeducational institutions with which they are affiliated; and Marian Court College and Radcliffe College which did not report data to HEGIS and IPEDS consistently between 1976 and 1993. Stern College of Yeshiva University self-identifies as a women's college, but was not included in the WCC listing for 1993 and does not report data to the U.S. Department of Education separately from the University.

6. *Chestnut Hill College Catalog, 1995–1996*, p. 4.

7. Please note when reading tables 3.1 through 3.20, located at the back of this chapter, that women's college's are included in all data labeled as "all institutions of higher education" or "all private 4-year colleges." Women's colleges were not removed from the totals because their relatively small numbers would have made little difference in analyzing these institutions compared to the norm for all institutions in the various tables.

8. U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1995.* Washington, DC: Government Printing Office, 1995, p. 167.

9. Laura I. Rendon, "Validating Culturally, Diverse Students: Toward a New Model of Learning and Student Development," *Innovative Higher Education.* Vol. 19, No. 1, Fall 1994, p. 33.

10. U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1995,* p. 167.

11. No comparable data are available for all institutions of higher education for 1989.

12. U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1995,* p. 167.

13. The Carnegie Foundation for the Advancement of Teaching has recently redesigned its classifications of institutions of higher education. While this report uses 1993 data in order to study the colleges that were women's colleges in 1993, this report will use the 1994 classifications in order to provide the most recent categorizations of women's colleges and comparable colleges and small universities.

14. Two of the 66 private 4-year women's colleges, Bay Path College and Moore College of Art and Design, are under different Carnegie classifications. Bay Path College is classified as an Associate of Arts institution, and Moore College of Art and Design is classified as an Art, Music, and Design institution.

15. The term "all degrees" in this chapter will refer to Associate, Bachelor's, Master's and Doctor's degrees. Since no First-Professional degrees are awarded by any of the women's colleges, there is no need to include First-Professional degrees in data analysis or discussion of degree data for this report.

16. National Science Foundation, *Women, Minorities, and Persons With Disabilities in Science and Engineering 1994.* Arlington, VA: National Science Foundation, 1994, p. 54.

17. National Science Foundation, *Women, Minorities, and Persons With Disabilities in Science and Engineering: 1994,* pp. 54–56, social science fields defined on p. 362.

18. National Science Foundation, *Women, Minorities, and Persons With Disabilities in Science and Engineering: 1994,* p. 244.

19. National Science Foundation, *Women, Minorities, and Persons With Disabilities in Science and Engineering: 1994,* p. 319.

20. *Barnard College, 1994–95 Catalogue,* p. 11.

21. Judith M. Gappa and David W. Leslie, *The Invisible Faculty.* San Francisco: Jossey-Bass Publishers, 1993. U.S. Department of Education, National Center for Education Statistics, *Fall Staff in Postsecondary Institutions, 1993.* Washington, DC: Government Printing Office, 1996.

22. Data representing average salaries for faculty were only used for academic year 1993–94 due to lack of response by three or more institutions identified for this section of the report as women's colleges for years prior to 1993–94

23. U.S. Department of Education. National Center for Education Statistics, *Digest of Education Statistics, 1995*, p. 168.

24. Cecilia Ottinger and Robin Sikula, "Women in Higher Education: Where Do We Stand?" *Research Briefs*. Vol. 4, No. 2, 1993, p. 10.

25. U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1995*, p. 241.

Chapter 4:

Women's Colleges in the United States, An Overview of Research and Questions for the Future

Introduction

This report has studied women's colleges, their history, and the issues surrounding single-sex education in higher education, from an institutional standpoint. The concluding chapter will continue this focus, but will look at what can be called "institutional effects," that is, the effect attending women's colleges have had on some women as individuals, according to education researchers. This chapter will also attempt to identify where more research is necessary on how attending a single-sex institution affects women.

Most research on women's colleges to date specifically examines whether and how the college environment or institutional characteristics of women's colleges impact the educational and occupational aspirations and achievement of women's college graduates. Among the issues examined by researchers:

- whether or not women have more opportunities to be leaders at women's colleges compared to coeducational colleges;
- whether women who graduate from women's colleges are more likely to enter traditionally male-dominated fields; and
- whether female faculty at women's colleges have an impact on women students.

These factors are the most frequently cited as contributing to the unique environment at women's colleges.

The previous chapter identified data reported to the U.S. Department of Education that showed women's colleges to be small institutions having similar or larger percentages of women obtaining bachelor's degrees in male-dominated fields, and having much larger percentages of women in professional, managerial, and administrative roles on campus than similar coeducational institutions. Other recent reports find that women's college graduates make up 24 percent of women members of Congress, and 33 percent of women board members of Fortune 500 companies. They are more likely to have studied mathematics, science, or economics, are more than two times as likely to receive doctoral degrees and more likely to attend medical school than their coeducational counterparts.[1]

Findings from many studies show that attending a women's college does impact students in positive ways. There are, however, studies that show little or no effect of women's colleges on various outcomes. Flaws in the methodologies of several studies have raised questions regarding their validity. Methodological problems include the lack of ability to control for background characteristics (such as student motivation, socio-economic status, and academic ability), small sample size, and focus on single institutions. Studies that use national survey data, multivariate, and causal analyses generally yield more reliable results. This brief review

samples current literature, focusing on frequently raised issues, specifically student satisfaction, opportunities for leadership, educational aspirations and attainment, career aspirations and occupational outcomes, and the campus climate.

Summary of Findings

Student Satisfaction

Several researchers have examined the relationship between institutional gender type and student satisfaction. Generally student satisfaction refers to satisfaction with social and academic life and personal and institutional goals, and is a component of satisfaction with the overall campus environment. Smith, Wolf, and Morrison (1995)[2] and Smith (1990)[3] examined the experiences of women students at coeducational institutions and women's colleges. Both studies use Cooperative Institutional Research Program (CIRP) data.[4] In her earlier study, Smith examined how institutional type (women's vs. coeducational) affects student satisfaction as well as perception of institutional goals, degree attainment, and educational aspirations. Smith found that, while controlling for background characteristics, attendance at a women's college relates positively to the quality of students' academic experience and involvement with faculty and staff.

Smith, Wolf, and Morrison (1995) examined student and institutional priorities and goals. Using path analysis and controlling for background characteristics, Smith *et al* found that women attending women's colleges perceived their institutions to be more concerned with student learning and civic involvement, and multiculturalism. The researchers also found that these perceptions predict academic and extracurricular involvement which in turn predict leadership, sense of competence, overall satisfaction, social satisfaction, success goals, learning goals, civic involvement goals, and multicultural goals. Although findings indicated that women attending women's colleges were less satisfied with their social lives, the authors believe that the perception of institutional concern for student development and growth "mediates the negative impact on social satisfaction."[5]

Opportunities for Leadership

Participation in campus activities and opportunity for leadership roles are often used as measures of student satisfaction. Miller-Bernal (1989)[6] found that women at coeducational colleges were generally more active in campus activities than their peers attending women's colleges. On the other hand, in a 1977 study, Astin found women attending women's colleges were more likely to obtain leadership positions, become involved in student government, develop high aspirations and persist to graduation than women attending coeducational institutions.[7]

Whitt (1994)[8] looked more closely at students' actual leadership experiences at three women's colleges. Specifically, Whitt looked at how women's colleges accomplish their goals of women's education by exploring the following questions:

- How do women students lead?
- How do they learn to lead?

- How do students describe their leadership experiences?
- How does the environment affect leadership experience?
- What are the implications of these students' experiences for coeducational colleges and universities interested in developing leadership opportunities and skills for undergraduate women?

Whitt interviewed 200 respondents (including students, faculty, administrators and alumnae) at three women's colleges (Wellesley College, Randolph-Macon Woman's College, and Westhampton College) for the study. Findings from this study indicate great similarities across institutions in terms of institutional practices and student descriptions of their experiences. Respondents indicated that involvement in leadership activities was associated with increased social and political awareness; improved thinking, writing, communication, and organizational skills, and expanded notions of majors and career choices. Self confidence and a sense of self-efficacy were also attributed to involvement in leadership activities.[9] Whitt suggested that women's colleges might serve as models of leadership development for institutions dedicated to encouraging women leaders.[10]

Educational Aspirations and Attainment

Research on women's colleges has also examined their impact on educational attainment and aspirations. The majority of studies focus on comparisons of women's college students and graduates with female students and graduates of coeducational institutions. Most of these studies look at whether attending a women's college makes a difference in entering a traditionally male-dominated field of study, and aspiring to or attending graduate school.

Riordan (1994) looked at some of the possible benefits of attending women's colleges on several human capital outcomes, including educational attainment, by measuring actual attendance (in years and semesters) rather than graduation. Using data from The National Longitudinal Study of the High School Class of 1972 (NLS-72), and controlling for initial ability (as measured by SAT scores) and socio-economic status, Riordan found no consistent differences in educational attainment between women attending women's colleges and their peers at coeducational institutions, although women who attended a women's college for only one year and then transferred to a coeducational institution were significantly more likely to continue their higher education for more time (years or semesters), than women at coeducational schools who never attended a women's college. Stoecker and Pascarella (1991),[11] found nonsignificant impacts of women's college attendance on women's postcollege educational attainments. Their study, using CIRP data, examined women who remained at one institution throughout their 4-year college career, whether that institution was a women's college or a coeducational institution. They controlled for background characteristics, precollege aspirations, and several institutional characteristics, such as selectivity.

Other research supports the idea that women's colleges have a positive impact on educational attainment and aspirations. Smith (1990) found women attending women's colleges were more likely to earn degrees than their peers at coeducational institutions. Miller-Bernal (1989) compared a women's college with a similar coeducational college and controlled for background characteristics. In her investigation of ways a women's college might promote women's achievement, Miller-Bernal found evidence that the environment at women's

colleges supports the development of women's abilities, particularly on such measures as faculty interaction, and relationships with peers that encourage academic work.

On the other hand, Kim and Alvarez show that having a high number of female faculty was not a *significant* predictor of women students' self-reported academic ability. But they also found that "attending a women-only college has a positive effect on students' academic ability, presumably due to being surrounded by peers who see themselves as intellectually able. It appears that at a women-only college, women students not only experience fewer distractions, but they also gain the self-confidence necessary to further develop themselves."[12] Kim and Alvarez suggest that future research should examine whether a high proportion of female faculty has any *indirect* effects on student development.

Career Aspirations and Occupational Outcomes

Similar to issues examined under the area of educational aspirations and attainment, the most frequently examined issues related to career aspirations and occupational outcomes are whether women who go to women's colleges have higher career aspirations and occupational outcomes than their counterparts at coeducational institutions, and whether women's college graduates enter traditionally male-dominated occupations at a higher rate.

As discussed in chapter 1, Tidball was one of the first researchers to examine the career and occupational outcomes of women's college graduates. A review of a recent study by the Henry A. Murray Research Center at Radcliffe by Bales and Sharp indicates that the presence of high percentages of female administrators at women's colleges was associated with higher career aspirations of seniors. Robinson, in reviewing the work of Tidball, Macoby, and Jaclin, reached the same conclusion. However, other researchers suggest caution in interpreting the results of some of these studies because of inadequate controls of students' background characteristics and certain institutional characteristics.

As mentioned previously, Riordan (1994) did do a study in which initial ability (SAT scores) and home background (SES) were controlled. In examining human capital outcomes of college graduates, Riordan found that attending a women's college is directly related to occupational attainment and indirectly related to personal income through occupation. His findings indicate that women's college attendees and attendees of coeducational institutions obtain the same amount of education, he also found that women's college attendees achieve higher occupational prestige. He identified a negative relationship between women's college attendance and number of hours worked, indicating that women's college attendees achieve significantly higher salaries despite working fewer hours per week.

In terms of attainment of job-related skills with which to initiate careers, Kim and Alvarez found that women seniors at coeducational institutions appear more likely to have acquired such skills. They also found that seniors at women's colleges have no advantage over their peers attending coeducational institutions in terms of preparation for entry into graduate or professional schools. Similarly, Riordan found that "graduates of coeducational colleges were significantly more likely to attain further postgraduate schooling than women's colleges."[13]

Bressler and Wendell (1980)[14] examined gender differences in career aspirations. Using data from CIRP (1967–1971), the authors looked at career preferences and educational plans of men and women attending selective, residential coeducational, men's and women's colleges.

Their findings indicate that college experiences result in causing both sexes, but particularly women, "to reject conventional role prescriptions and are thus instrumental in markedly reducing initial male-female differences in occupational choice."[15] However, they found that the gender composition of the institution accounts for a great deal of the impact on career choice.

Pascarella and Terenzini (1991)[16] in a synthesis of research on how college impacts students, examined various research studies on how institutional gender influences women's career choices as well as their careers. They found evidence suggesting that single-sex colleges have a tendency to enhance students', and particularly womens', socioeconomic aspirations and career aspirations after taking into account college selectivity and background characteristics. They also found graduates of women's colleges are strongly overrepresented in the high-status, male-dominated occupations of medicine, scientific research, and engineering.[17]

However, there is research indicating that college selectivity or even student recruitment factors, as opposed to institutional gender composition, play a role in students' occupational aspirations and achievement. In a 1991 study of 1971–80 CIRP data on 2,485 women, 273 of whom had attended women's colleges, Pascarella with Stoecker (1991)[18] controlled for several student background variables and institutional selectivity variables. They found no statistically significant direct or indirect effect of attending a women's college on women either entering male-dominated careers or on the occupational status of the jobs held by women graduates of women's colleges. Stoecker and Pascarella suggest that success may be due to recruitment efforts rather than socialization.

Lentz (1982)[19] compared career aspirations of graduates of women's colleges and coeducational colleges at three levels of college selectivity. Selectivity was based on ratings from *Barron's Profiles of American Colleges* (1973). Lentz first compared aspirations based on college type and found no differences between women's and coeducational colleges in terms of plans to enter traditionally male-dominated careers, to pursue graduate or professional education, or what she calls "level of the organizational ladder aspired to" (plans to enter various levels of management). When differences were looked at in terms of selectivity level, Lentz found only a relationship between selectivity level and desire to pursue traditionally male-dominated careers. Lentz suggested that further research be done on the climate of selective colleges and also whether women attending more selective colleges have different college experiences than women attending less selective institutions.

The Campus Climate Debate

Studies to date have provided insight into environmental impact and college climate on student outcomes. In their research synthesis, Pascarella and Terenzini found evidence pointing to a relationship between attending a single-sex institution and higher levels of persistence and educational attainment, particularly for women.[20] The research they examined also supports the idea that women's colleges provide a uniquely supportive climate for women and suggest that the large number of female faculty role models may be an important factor explaining not only high levels of educational attainment, but also career aspirations and attainment.[21]

In general, other researchers find that it is unclear as to whether the positive outcomes of women's college students and graduates are related more to gender composition of the institution, selectivity, or institution type (as most women's colleges are relatively small, liberal arts institutions). Miller-Bernal (1993)[22] did compare experiences of women students at four similar liberal arts colleges of different gender compositions (a women's college, a coordinate of a men's college, a long-time coeducational college, and a college that had recently become coeducational). The purpose of the study was to test for differences among these four types of institutions on the following common factors leading to high achievement among women's college graduates: the presence of faculty role models, opportunities for leadership, and supportive environment of women's colleges. Miller-Bernal's findings indicate that both the women's colleges and the coordinate college in the sample did differ from the others in terms of these three factors. The study, however, did not find that these "college experience" factors had a great deal of impact on student outcomes.

There is research that suggests single-sex schools and women's colleges provide a unique environment conducive to high levels of learning and achievement for women. In comparing the merits of single-sex education vs. coeducation, numerous articles point to a "chilly climate" for girls and women in coeducational classrooms at both the secondary and postsecondary level.[23] A number of recent studies found that teenage girls frequently leave high school with lower aspirations and poor self-esteem as a result of the climate in coeducational classrooms.[24] Williams (1990)[25] reviewed some of the literature on this issue and found little research at the postsecondary level. However, Williams suggests based on her literature review, that women do not participate as much as men students in coeducational classrooms, especially those taught by male faculty.

These reports are in contrast to national data showing not only that the number of women enrolling in postsecondary institutions has surpassed that of men, but also that women have achieved great gains in educational attainment over the last several decades. For example, data from the National Center for Education Statistics show an increase in the aspirations of female high school seniors between 1982 and 1992.[26]

Several reports using nationally representative data such as the NLS-72 point to strong evidence of womens' achievements in higher education. Adelman, in his 1991 report, *Women at Thirtysomething*, used the NLS-72 high school records, test scores, and the postsecondary transcripts to examine women's behavior in education and the labor market. He found women's academic performance in high school was far stronger than that of men.[27] He also found that although women had lower educational aspirations, they continued on to postsecondary education at the same rate as men, received more scholarships, and completed both associate's and bachelor's degrees at a faster pace than men[28] Adelman also found that women earned consistently higher grade point averages in college than men no matter what field.

Apling and White (1993)[29] using Census data, showed a steady growth in the proportion of women enrolling in postsecondary institutions between 1976 and 1990. They also found substantial increases in the number of associate's and bachelor's degrees between 1965 and 1989, with women earning more than 50 percent of these degrees by the end of the 1980s.[30] The paradox here is, if the climate is indeed a chilly one for women at various educational levels, why are they achieving at such high rates?

Conclusion

Several research studies suggest that further study of women's colleges is warranted, given the large numbers of women enrolled in higher education. Stoecker and Pascarella suggest looking more closely at how various factors affect both short and long-term postcollege outcomes for women at both women's colleges and coeducational institutions. These factors include:

- student-faculty interactions;
- presence of female role models;
- influence of peer groups;
- classroom and institutional climate; and
- college experiences.

Riordan suggests looking at the potential of colleges to develop what he calls "social capital" of their students, particularly women. Riordan defines social capital as a parental or institutional outlay (investment), utilized as an input by children and students toward the production of their own physical, human, and social capital. Moore, Piper, and Schaefer[31] also feel more research is needed to reflect changes in students and society in terms of women's roles and their motivations. They also suggest examining whether the positive differences noted as a result of attending a women's college are lasting differences and "whether the apparent benefits of these schools continue to be equally applicable to future classes of students as college enrollment and recruitment patterns change."[32]

More research needs to be done on women-only institutions to answer questions raised by current studies and inconsistencies in findings. For example, findings are inconclusive regarding evidence of both the numbers of women entering traditionally male-dominated fields and a definitive relationship between the campus environment and outcomes. There is no nationally representative research on why women choose to go to women's colleges. Researchers themselves have pointed out limitations in their own research based on lack of ability to control for certain factors, inadequate measures of variables, and samples that don't adequately reflect the experiences of women of color.

It would also be useful to look at differences between women at coeducational institutions and women at women's colleges, not only in actual achievement of graduates, but also between their precollege aspirations and eventual academic achievement. More comparisons of similar institutions, using larger samples, needs to be done to determine whether it is the gender composition of an institution or the institution type (ie: liberal arts) that has a greater impact on college experiences and outcomes. And finally, in light of statistics showing great strides in degree achievement and academic achievement of women over the last two decades, is there indeed a "chilly climate" for women at coeducational institutions?

In addition, other issues that have come up throughout this report specifically related to women's colleges warrant further investigation. For example:

- What happened to women's colleges that closed or became coeducational?
- What happened to 2-year women's colleges that became 4-year institutions?
- How do schools that remain women's colleges survive?
- What can other institutions learn from those women's colleges that have survived, in terms of such issues as marketing, enrollment management, and program development?

Further research on women's colleges would not only help to further and clarify our understanding of these institutions and of their impact on students and higher education in general, it would also provide valuable information to the entire field of higher education. Women's colleges have had a long and distinguished history of serving the higher education needs of American women. It is important that all higher education institutions learn from their success.

Notes

1. Nadia Lerner, "Women's Schools: Where the Brains Are, The Boys Aren't," *Advocate and Greenwich Times.* August 8, 1993.

   Myra Smith, "Single-Gender Colleges Thrive with No Eds," *Chicago Tribune. April 10,* 1994.

   Maria Newman, "Women's Colleges Find a New Popularity," *New York Times.* January 15, 1994, p. 1.

   Mary-Christine Phillip, "For Women Only: After Years of Decline, Women's Colleges Gaining Popularity," *Black Issues in Higher Education.* October 21, 1993.

2. Daryl G. Smith, Lisa E. Wolf, and Diane E. Morrison, "Paths to Success: Factors Related to the Impact of Women's Colleges," *Journal of Higher Education.* Vol. 66, No. 3., 1995.

3. Daryl G. Smith, "Women's colleges and Coed Colleges: Is there a Difference for Women'?" *Journal of Higher Education.* Vol. 61 (March/April 1990).

4. The Cooperative Institutional Research Program (CIRP) is a national longitudinal study of the American higher education system and is sponsored by the American Council on Education and the Higher Education Research Institute (HERI) at the University of California, Los Angeles. CIRP has collected data since 1966 involving 1,300 institutions, over 8 million students and 100,000 faculty.

5. Smith, Wolf, and Morrison, "Paths to Success: Factors Related to the Impact of Women's Colleges," p. 263.

6. Leslie Miller-Bernal, "College Experiences and Sex-Role Attitudes: Does A Women's College Make A Difference?" *Youth and Society.* Vol. 20, No. 4, pp. 363–387.

7. Alexander Astin, *Four Critical Years.* San Francisco: Jossey Bass, 1977, p. 233.

8. Elizabeth J. Whitt, "I Can Be Anything!: Student Leadership in Three Women's Colleges," *Journal of College Student Development.* Vol. 35, May 1994.

9. Whitt, "I Can Be Anything!: Student Leadership in Three Women's Colleges," p. 202.

10. Whitt, "I Can Be Anything!: Student Leadership in Three Women's Colleges," p. 200.

11. Judith L. Stoecker and Ernest T. Pascarella, "Women's Colleges and Women's Career Attainments Revisited," *Journal of Higher Education.* Vol. 62, No. 4 (July/August 1991).

12. Mikyong Kim and Rodolfo Alvarez, "Women-Only Colleges: Some Unanticipated Consequences," *Journal of Higher Education.* Vol. 66, No. 6 (November/December) p. 661.

13. Cornelius Riordan, "The Value of Attending a Women's College: Education, Occupation, and Income Benefits," *Journal of Higher Education.* Vol. 65, No. 4 July/August 1994, p. 488.

14. Marvin Bressler and Peter Wendell, "The Sex Composition of Selective Colleges and Gender Differences in Career Aspirations, *Journal of Higher Education.* Vol. 51, No. 6. 1980.

15. Bressler and Wendell, "The Sex Composition of Selective Colleges and Gender Differences in Career Aspirations,"p. 661.

16. Ernest T. Pascarella and Patrick T. Terenzini, *How College Affects Students. San* Francisco, Jossey Bass, 1991.

17. Pascarella and Terenzini, *How College Affects Students,* p. 601.

18. Stoecker and Pascarella, "Women's Colleges and Women's Career Attainments Revisited," pp. 394–406,

19. Linda P. Lentz, "College Selectivity, Not College Type, Is Related to Graduate Women's Career Aspirations." Paper presented at the Annual Meeting of the American Educational Research Association, New York, March 1982 ED 216 628.

20. Pascarella and Terenzini, *How College Affects Students,* p. 453.

21. Pascarella and Terenzini, *How College Affects Students,* p. 383. .

22. Leslie Miller-Bernal, "Single-Sex versus Coeducational Environments: A Comparison of Women Students' Experiences at Four Colleges," *American Journal of Education. Vol.* 102, No. 1, November, 1993.

23. Martha Brant, "Far Beyond White Gloves and Teas," *Newsweek.* April 25, 1994, p. 59.

Susan Estrich, "Separate Is Better," *New York Times Magazine.* May 22, 1994, pp. 38–39.

Riordan, "The Value of Attending a Women's College: Education, Occupation, and Income Benefits."

Bernice R. Sandler, "The Campus Climate Revisited: Chilly for Women Faculty, Administrators, and Graduate Students,," in *Women in Higher Education, A Feminist Perspective.* (Judith S. Glazer, Estela M, Bensimon, and Barbara K. Townsend (eds.).) Washington, DC: American Council on Education, pp. 175–76.

Myra Sadker and David Sadker, "Why Schools Must Tell Girls: You're Smart, You Can Do It," Daily News, USA Weekend. February 4–6, 1994, pp. 5, 28.

Smith, Wolf, and Morrison, "Paths to Success: Factors Related to the Impact of Women's Colleges," p. 245.

Ben Gose, "Classroom Climate Found Still `Chilly' for Women," *Chronicle of Higher Education. March* 1, 1996, p. A 38.

24. Sandra Reeves and Anne Marriott, "A Burst of Popularity: Most Women's Colleges Are Flourishing By Offering Students A Sense of Empowerment," *U.S. News and World Report.* September 26, 1994, pp. 105–108.

    Sadker and Sadker, "Why Schools Must Tell Girls: You're Smart, You Can Do It," p. 28.

    Riordan, "The Value of Attending a Women's College: Education, Occupation, and Income Benefits," p. 486.

25. Dana Williams, "Is the Post-secondary Classroom a Chilly One for Women"? A Review of the Literature," *The Canadian Journal of Higher Education.* Vol. 20, No. 3. 1990.

26. U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1996.* Washington, DC: Government Printing Office, 1996, p. 413.

27. Clifford Adelman, *Women at Thirtysomething.* Washington, DC: Government Printing Office, 1991, p. v.

28. Adelman, *Women at Thirtysomething,* p. 7.

29. Richard Apling and Liane E. White, *Women's Educational Status: Some Indicators.* Washington, DC: Congressional Research Service, 1993.

30. Apling and White, *Women's Educational Status: Some Indicators,* pp. 11–12.

31. Mary Moore, Valerie Piper, and Elizabeth Schaefer, "Single-sex Schooling and Educational Effectiveness: A Research Overview," *Single Sex Schooling: Perspectives From Practice and Research, Volume* 1. Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education, 1993.

32. Moore, Piper, and Schaefer, *"Single-sex Schooling and Educational Effectiveness: A Research Overview,"* p. 27.

Bibliography

Adelman, C. 1991. *Women at Thirtysomething.* Washington, DC: Government Printing Office.

Antler, J. 1982. "Culture, Service and Work: Changing Ideals of Higher Education for Women," in *The Undergraduate Woman: Issues in Educational Equity.* Pamela J. Perun (ed). Lexington, MA: DC Heath and Co.

Apling, R.; and White, L.E. 1993. *Women's Educational Status: Some Indicators.* Washington, DC: Congressional Research Service.

Astin, A. 1977. *Four Critical Years.* San Francisco: Jossey Bass.

Astin, H. S.; and Hirsch, W. Z. (eds.) 1978. *The Higher Education of Women: Essays in Honor of Rosemary Park.* New York: Praeger Publishers.

Baker, D. P. September 22, 1996. "By One Vote, VMI Decides to Go Coed," *The Washington Post*, A1, A10.

Barnard College, 1994–95 Catalogue.

Boas, L. S. 1935. *Women's Education Begins.* Norton, Massachusetts: Wheaton College Press.

Brant, M. April 25, 1994. "Far Beyond White Gloves and Teas," *Newsweek*, p. 59.

Bressler, M.; and Wendell, P. 1980. "The Sex Composition of Selective Colleges and Gender Differences in Career Aspirations," *Journal of Higher Education.* 51 (6).

Carter, H.; and Glick, P.C. 1976. *Marriage and Divorce.* Cambridge, MA: Harvard University Press.

Chafe, W. H. 1977. *Women and Equality.* Oxford: Oxford University Press.

The Chatham College Catalog 1995–96.

Chestnut Hill College Catalog, 1995–1996.

College of New Rochelle, School of Arts & Sciences, 1994–1995.

Congressional Quarterly. 1973. *Editorial Research Reports on The Women's Movement.* Washington, DC: Congressional Quarterly.

Conway, J. K. 1989. "Higher Education for Women," *American Behavioral Scientists.* 32 (6), pp. 633–639.

Deckard, B. 1975. *The Women's Movement.* New York: Harper & Row.

Estrich, S. May 22, 1994. "Separate Is Better," *New York Times Magazine*, pp. 38–39.

Farnham, C. A. 1994. *The Education of the Southern Belle: Higher Education and Student Socialization in the Antebellum South.* New York: New York University Press.

Friedan, B. 1963. *The Feminine Mystique.* New York: W.W. Norton & Company, Inc.

Gappa, J. M.; and Leslie, D. W. 1993. *The Invisible Faculty.* San Francisco: Jossey-Bass Publishers.

Gelb, J.; and Palley, M. L. 1982. *Women and Public Policies.* Princeton, NJ: Princeton University Press.

Gleick, E. October 7, 1996. "Hell Hath No Fury," *Time*, p. 83.

Gordon, L. 1990. "From Seminary to University," *Gender and Higher Education in the Progressive Era.* New Haven: Yale University Press.

Gose, B. March 1, 1996. "Classroom Climate Found Still `Chilly' for Women," *Chronicle of Higher Education*, p. A 38.

Hirschorn, M. W. May 20 , 1987. "Plan to Admit Men to Wheaton College Stirs Bitter Fight on and off the Campus," *Chronicle of Higher Education*, pp. 30–31, 34.

Horowitz, H. L. 1984. *Alma Mater: Design and Experience in the Women's Colleges from their Nineteenth Century Beginnings to the 1930s.* New York: Alfred A. Knopf.

Horowitz, H. L. Winter 1995. "The `Hateful' Wellesley Inaugural Address," *Wellesley.*

Horowitz, H. L. 1994. *The Power and Passion of M. Carey Thomas.* New York: Alfred A. Knopf.

Kendall, E. 1975 *Peculiar Institutions.* New York: G.P. Putnam's Sons.

Kim, M.; and Alvarez, R. 1995. "Women-Only Colleges: Some Unanticipated Consequences," *Journal of Higher Education.* 66 (6).

Lederman, D. February 21, 1990. "To Survive, Queens College Switched to Coeducation and Revamped Its Curriculum—and Now It's Added a Full-Scale Sports Program," *Chronicle of Higher Education*, pp. 43–45.

Lerner, N. August 8, 1993. "Women's Schools: Where the Brains Are, The Boys Aren't." *Advocate and Greenwich Times.*

Lentz, L. P. March 1982. "College Selectivity, Not College Type, Is Related to Graduate Women's Career Aspirations. " Paper presented at the Annual Meeting of the American Educational Research Association.

Marmielo, N. 1996. "For Newcomb's Future," *Tulanian*, New Orleans, LA: Tulane Office of University Publications.

The A.N. Marquis Company. 1966. *Who Was Who in America.* Chicago: The A.N. Marquis Company.

Mary Baldwin College Academic Catalogue 1995–1996.

McCandless, A. T. 1992. "The Higher Education of Black Women in the Contemporary South," *The Mississippi Quarterly.* XLV (4).

McCandless, A. T. 1993. "Progressivism and the Higher Education of Southern Women," *North Carolina Historical Review.* LXX (3).

Midway College Catalog 1995–1997

Miller-Bernal, L. 1993. "College Experiences and Sex-Role Attitudes: Does A Women's College Make A Difference?" *Youth and Society*. 20 (4), pp. 363–387.

Miller-Bernal, L. 1993. "Single-Sex versus Coeducational Environments: A Comparison of Women Students' Experiences at Four Colleges," *American Journal of Education*. 102 (1).

Mississippi University for Women v. Hogan, 102 S.Ct.3333 (1982).

Mississippi University for Women 1994–95 Bulletin.

National Science Foundation. 1994. *Women, Minorities, and Persons With Disabilities in Science and Engineering: 1994.* Arlington, VA: National Science Foundation.

Newcomer, M. 1959. *A Century of Higher Education for American Women.* New York: Harper and Brothers.

Newman, M. January 15, 1994. "Women's Colleges Find a New Popularity," *New York Times*, p. 1.

Nicklin, J. L. March 21, 1990, "The Renaissance of Wilson college, a Financial and Academic Success," *Chronicle of Higher Education*, p. A3.

Oates, M.J.(ed) 1987. *Higher Education for Catholic Women: An Historical Anthology.* New York: Garland Publishing Inc.

Ottinger, C.; and Sikula, R. 1993. "Women in Higher Education: Where Do We Stand?" *Research Briefs*. 4 (2).

Palmieri, P. 1995. *In Adamless Eden: The Community of Faculty Women at Wellesley.* New Haven, CT: Yale University Press.

Palmieri, P. 1988. "Women's Colleges," in *Women in Academe: Progress and Prospects.* Mariam K. Chamberlain (ed). New York: Russell Sage Foundation.

Park, R. 1978. "Some Considerations on the Higher Education of Women" in Helen S. Astin and Werner Z. Hirsch (eds), *The Higher Education of Women: Essays in Honor of Rosemary Park.* New York: Praeger Publishers.

Pascarella, E. T.; and Terenzini, P. T. 1991. *How College Affects Students.* San Francisco, Jossey Bass.

Pearson, C.S.; Shavlik, D. L.; and Touchton, J.G. 1989. *Educating the Majority: Women Challenge Tradition in Higher Education.* New York: Collier Macmillan Publishers.

Phillip, M. October 21, 1993 "For Women Only: After Years of Decline, Women's Colleges Gaining Popularity." *Black Issues in Higher Education.*

Phillips, J. M. *Brown University: A Short History.* "http://www.brown.edu."

Pieschel B. S.; and Pieschel, S. R. 1984. *Loyal Daughters: One Hundred Years at Mississippi University for Women.* Oxford, Mississippi: University of Mississippi Press.

Reeves, S.; and Marriott, A. September 26, 1994. "A Burst of Popularity: Most Women's Colleges Are Flourishing By Offering Students A Sense of Empowerment," *U.S. News and World Report*, pp. 105–108.

Rendon, L. I. 1994. "Validating Culturally Diverse Students: Toward a New Model of Learning and Student Development," *Innovative Higher Education*. 19 (1).

Rice, J. K. 1991. "Separation and the Education of Women," *Initiatives*. 53 (3).

Riordan, C. 1994. "The Value of Attending a Women's College: Education, Occupation, and Income Benefits," *Journal of Higher Education*. 65 (4).

Sadker M.; and Sadker, D. February 4–6, 1994. "Why Schools Must Tell Girls: You're Smart, You Can Do It," *Daily News, USA Weekend*, pp. 5, 28.

Sandler, B. 1993. "The Campus Climate Revisited: Chilly for Women Faculty, Administrators, and Graduate Students," in *Women in Higher Education, A Feminist Perspective* (Judith S. Glazer, Estela M. Bensimon, and Barbara K. Townsend (eds.)). Washington, DC: American Council on Education.

Sandler, B. 1989. *The Restoration of Title IX: Implications for Higher Education*. Washington, DC: Association of American Colleges, Project on the Status of Women.

Scripps, The Women's College, Claremont; 1994–96 Catalog.

Sebrechts, J. S. "The Perspective of Women's Colleges on the Supreme Court Decision on VMI" in a Memorandum, Washington, D.C.: Women's College Coalition, August 1, 1996.

Shoemaker, D. 1982. "Hood College," *Educational Record*. 63 (1), pp. 52–57.

Smith College Bulletin: 1994–1995 Catalog.

Smith, D. G; Wolf, L. E.; and Morrison, D. E. 1995. "Paths to Success: Factors Related to the Impact of Women's Colleges," *Journal of Higher Education*. 66 (3).

Smith, D. G. 1990. "Women's colleges and Coed Colleges: Is there a Difference for Women?" *Journal of Higher Education*. 61.

Smith, M. April 10, 1994, "Single-Gender Colleges Thrive with No Eds," *Chicago Tribune*.

Solomon, B. M. 1985. *In the Company of Educated Women: A History of Women and Higher Education in America*. New Haven, CT: Yale University Press.

Stewart, G. C. Jr. 1994. *Marvels of Charity: History of American Sisters and Nuns*. Huntington, Indiana: Our Sunday Visitor Publishing Division.

Stoecker, J. L.; and Pascarella, E. T. 1991. "Women's Colleges and Women's Career Attainments Revisited," *Journal of Higher Education*. 62 (4).

Sweet Briar College Catalog 1994–1995.

Thomas, M. C. 1990. "Should Higher Education for Women Differ?" Reprinted in *The American Reader: Words that Moved a Nation*, ed. Diane S. Ravitch. New York: HarperCollins Publishers.

Thompson, J. 1982. *Marking a Trail: A History of the Texas Woman's University.* Denton, Texas: Texas Woman's University Press.

U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics. 1995. *Digest of Education Statistics.* Washington, DC: Government Printing Office.

U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics. 1996. *Digest of Education Statistics.* Washington, DC: Government Printing Office.

U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics. 1992. *1991–92 Directory of Postsecondary Institutions, Volume I.* Washington, DC: Government Printing Office.

U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics. 1995. *Enrollment in Higher Education: Fall 1984 through Fall 1993.* Washington, DC: Government Printing Office.

U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics. *Fall Staff in Postsecondary Institutions, 1993.* Washington, DC: Government Printing Office.

U. S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics. 1992. *Historically Black Colleges and Universities, 1976–90.* Washington, DC: Government Printing Office.

U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics. 1993. *120 Years of American Education: A Statistical Portrait.* Washington, DC: Government Printing Office.

U.S. Department of Education, Office of Educational Research and Improvement, 1993. *Single-Sex Schooling: Perspectives from Practice and Research, Volume 1.* Washington, DC: Office of Educational Research and Improvement.

Whitt, E. J. 1994. "I Can Be Anything!: Student Leadership in Three Women's Colleges," *Journal of College Student Development.* 35.

Williams, D. 1990. "Is the Post-secondary Classroom a Chilly One for Women? A Review of the Literature." *The Canadian Journal of Higher Education.* 20 (3).

Woody, T. 1929. *A History of Women's Education in the United States.* Volume 4, Book 2. New York: The Science Press.

Wolanin, T.; and Gladieux, L. 1975. "The Political Culture of a Policy Arena: Higher Education," *What Government Does.* (Matthew Holden, Jr. and Dennis L. Dresang (eds.)) Beverly Hills, CA: Sage Publications.

———*The Great Republic: A History of the American People* (3rd edition). Lexington, Massachusetts: D.C. Heath and Co., 1985, pp. 598–603.

———"Women's Colleges," *The Economist.* May 30, 1987, pp. 35–36.

Appendix

List of Appendix Tables

Appendix table 1:	Fall enrollment at women's colleges, by size of institutions: 1993.
Appendix table 2:	Fall enrollment at women's colleges, by affiliation of institution: 1993.
Appendix table 3:	Fall enrollment at women's colleges, by geographic region and state: 1993.
Appendix table 4:	Growth in female enrollment at women's colleges and all institutions of higher education: 1976–1993.
Appendix table 5:	Fall enrollment at women's colleges, by sex and status: 1976.
Appendix table 6:	Fall enrollment at women's colleges, by sex and race/ethnicity: 1976.
Appendix table 7:	Fall enrollment at women's colleges, by age, sex, and level: 1989.
Appendix table 8:	Fall enrollment at women's colleges, by sex and attendance status: 1993.
Appendix table 9:	Fall enrollment at women's colleges, by sex and race/ethnicity: 1993.
Appendix table 10:	Fall enrollment at women's colleges, by age, sex, and level: 1993.
Appendix table 11:	Female undergraduate enrollment at private 4-year women's colleges, by Carnegie classification and age: Fall 1993.
Appendix table 12:	Female undergraduate enrollment at private 4-year women's colleges, by Carnegie classification and race/ethnicity: Fall 1993.
Appendix table 13:	Female undergraduate enrollment at private 4-year women's colleges, by Carnegie classification and attendance status: Fall 1993.
Appendix table 14:	Degrees awarded by women's colleges, by level 1992–93.
Appendix table 15:	Bachelor's degrees conferred upon women, by private 4-year women's colleges, by Carnegie classification: 1992–93.
Appendix table 16:	Degrees awarded by women's colleges, by level: 1976–77.
Appendix table 17:	Number of staff at private 4-year women's colleges, by occupational category, sex, and Carnegie classification: Fall 1993.
Appendix table 18:	Average salary for full-time faculty at women's colleges, by sex and Carnegie classification: 1993–94.

Appendix table 1— Fall enrollment at women's colleges, by size of institution: 1993

Institution name	Enrollment	Institution name	Enrollment
Under 200		**1,000 to 2,499 (cont.)**	
Southern Virginia College For Women	179	Trinity College (DC)	1,235
		Columbia College	1,249
200 To 499		Mary Baldwin College	1,327
		Emmanuel College	1,332
Saint Mary's College (NC)	299	Saint Mary's College (IN)	1,466
Aquinas College at Newton	303	College of Saint Elizabeth	1,484
Judson College	320	Mount Mary College	1,533
Aquinas College at Milton	349	Mount Saint Mary's College	1,535
Moore College of Art and Design	362	Cedar Crest College	1,543
Cottey College	370	Ursuline College	1,563
Mount Vernon College	378	Marymount Manhattan College	1,773
Blue Mountain College	390	Bryn Mawr College	1,810
Pine Manor College	400	College of Saint Benedict	1,818
Wells College	415	Carlow College	1,865
Wesleyan College	428	Mount Holyoke College	1,951
Peace College	447	Saint Joseph College	2,022
		Hood College	2,061
500 To 999		Spelman College	2,065
		Brenau University	2,120
Lasell College	529	Barnard College	2,197
Sweet Briar College	570	Meredith College	2,345
Scripps College	576	Immaculata College	2,348
Bay Path College	578	Wellesley College	2,351
Rosemont College	585		
Agnes Scott College	600		
Chatham College	623		
Bennett College	664	**2,500 To 4,999**	
Randolph-Macon Woman's College	709		
Harcum Junior College	736		
Notre Dame College	794		
William Woods College	816	Alverno College	2,557
Salem College	830	Georgian Court College	2,580
Wilson College	875	Mississippi University For Women	2,585
Midway College	943	College of Saint Catherine	2,588
Seton Hill College	962	Smith College	2,937
Endicott College	963	Fisher College	3,011
Stephens College	987	College of Notre Dame Maryland	3,07
		Simmons College	3,334
1,000 To 2,499		Russell Sage College-Main Campus	4,217
Hollins College	1,059		
Trinity College (VT)	1,099		
Marymount College	1,101	**5,000 To 9,999**	
Converse College	1,121		
Mills College	1,138		
Chestnut Hill College	1,151		
Regis College	1,160		
College of our Lady of The Elms	1,164	Lesley College	5,871
College of Saint Mary	1,168	College of New Rochelle	6,100
Saint Mary-of-the-Woods College	1,187	Texas Woman's University	9,702

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Appendix table 2—Fall enrollment at women's colleges, by affiliation of institution: 1993

Institution name	Affiliation	Enrollment
Total enrollment - all women's colleges		118,880
Total enrollment - all religious women's colleges		49,038
Catholic		
Total		**36,368**
Aquinas College at Milton		349
Aquinas College at Newton		303
Carlow College		1,865
Chestnut Hill College		1,151
College of Notre Dame Maryland		3,077
College of Our Lady of The Elms		1,164
College of Saint Benedict		1,818
College of Saint Catherine		2,588
College of Saint Elizabeth		1,484
College of Saint Mary		1,168
Emmanuel College		1,332
Georgian Court College		2,580
Immaculata College		2,348
Mount Mary College		1,533
Mount Saint Mary's College		1,535
Notre Dame College		794
Regis College		1,160
Rosemont College		585
Saint Joseph College		2,022
Saint Mary-of-the-Woods College		1,187
Saint Mary's College (IN)		1,466
Seton Hill College		962
Trinity College (DC)		1,235
Trinity College (VT)		1,099
Ursuline College		1,563
Protestant		
Total		**12,670**
Agnes Scott College		600
Bennett College		664
Blue Mountain College		390
Cedar Crest College		1,543
Columbia College		1,249
Judson College		320
Mary Baldwin College		1,327
Meredith College		2,345
Midway College		943
Peace College		447
Randolph-Macon Woman's College		709
Salem College		830
Wesleyan College		428
Wilson College		875
Public		
Total		**12,287**
Mississippi University For Women		2,585
Texas Woman's University		9,702
Independent		
Total		**57,555**
Alverno College		2,557
Barnard College		2,197
Bay Path College		578
Brenau University		2,120
Bryn Mawr College		1,810
Chatham College		623
College of New Rochelle		6,100
Converse College		1,121
Cottey College		370
Endicott College		963
Fisher College		3,011
Harcum Junior College		736
Hollins College		1,059
Hood College		2,061
Lasell College		529
Lesley College		5,871
Marymount College		1,101
Marymount Manhattan College		1,773
Mills College		1,138
Moore College of Art and Design		362
Mount Holyoke College		1,951
Mount Vernon College		378
Pine Manor College		400
Russell Sage College-Main Campus		4,217
Saint Mary's College (NC)		299
Scripps College		576
Simmons College		3,334
Smith College		2,937
Southern Virginia College for Women		179
Spelman College		2,065
Stephens College		987
Sweet Briar College		570
Wellesley College		2,351
Wells College		415
William Woods College		816

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Institutional Characteristics" and "Fall Enrollment" surveys, unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Appendix table 3— Fall enrollment at women's colleges, by geographic region and state: 1993

Institution name	Region and state	Enrollment	Institution name	Region and state	Enrollment
Total enrollment	118,880				
Total	**Northeast**	**62,081**	**Total**	**South**	**36,703**
Saint Joseph College	CT	2,022	Judson College	AL	320
Aquinas College at Milton	MA	349	Mount Vernon College	DC	378
Aquinas College at Newton	MA	303	Trinity College	DC	1,235
Bay Path College	MA	578	Agnes Scott College	GA	600
College of Our Lady of the Elms	MA	1,164	Brenau University	GA	2,120
Emmanuel College	MA	1,332	Spelman College	GA	2,065
Endicott College	MA	963	Wesleyan College	GA	428
Fisher College	MA	3,011	Midway College	KY	943
Lasell College	MA	529	College of Notre Dame Maryland	MD	3,077
Lesley College	MA	5,871	Hood College	MD	2,061
Mount Holyoke College	MA	1,951	Blue Mountain College	MS	390
Pine Manor College	MA	400	Mississippi University for Women	MS	2,585
Regis College	MA	1,160	Bennett College	NC	664
Simmons College	MA	3,334	Meredith College	NC	2,345
Smith College	MA	2,937	Peace College	NC	447
Wellesley College	MA	2,351	Saint Mary's College	NC	299
College of Saint Elizabeth	NJ	1,484	Salem College	NC	830
Georgian Court College	NJ	2,580	Columbia College	SC	1,249
Barnard College	NY	2,197	Converse College	SC	1,121
College of New Rochelle	NY	6,100	Texas Woman's University	TX	9,702
Marymount College	NY	1,101	Hollins College	VA	1,059
Marymount Manhattan College	NY	1,773	Mary Baldwin College	VA	1,327
Russell Sage College--Main Campus	NY	4,217	Randolph--Macon Woman's College	VA	709
Wells College	NY	415	Southern Virginia College for Women	VA	179
Bryn Mawr College	PA	1,810	Sweet Briar College	VA	570
Carlow College	PA	1,865			
Cedar Crest College	PA	1,543			
Chatham College	PA	623			
Chestnut Hill College	PA	1,151	**Total**	**Midwest**	**16,847**
Harcum Junior College	PA	736	Saint Mary-of-the--Woods College	IN	1,187
Immaculata College	PA	2,348	Saint Mary's College	IN	1,466
Moore College of Art and Design	PA	362	College of Saint Benedict	MN	1,818
Rosemont College	PA	585	College of Saint Catherine	MN	2,588
Seton Hill College	PA	962	Cottey College	MO	370
Wilson College	PA	875	Stephens College	MO	987
Trinity College	VT	1,099	William Woods College	MO	816
			College of Saint Mary	NE	1,168
Total	**West**	**3,249**	Notre Dame College	OH	794
Mills College	CA	1,138	Ursuline College	OH	1,563
Mount Saint Mary's College	CA	1,535	Alverno College	WI	2,557
Scripps College	CA	576	Mount Mary College	WI	1,533

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Appendix table 4— Growth in female enrollment at women's colleges and all institutions of higher education: 1976–1993

Institution, attendance status and race/ethnicity	Female enrollment 1976	Female enrollment 1993	Difference	Difference as a percent of total
Total	82,907	109,047	26,140	100.0
Women's colleges-full-time	64,768	68,234	3,466	13.3
Women's colleges-part-time	18,139	40,813	22,674	86.7
Total*	5,201,309	7,877,942	2,676,633	100.0
All institutions-full-time	3,013,433	4,237,137	1,223,704	45.7
All institutions-part-time	2,187,876	3,640,805	1,452,929	54.3
Total	82,907	109,047	26,140	100.0
Women's colleges-white	70,658	84,048	13,390	51.2
Women's colleges-minority	10,640	22,126	11,486	43.9
Women's colleges-nonresident alien	1,609	2,873	1,264	4.8
Total*	5,191,224	7,877,942	2,686,718	100.0
All institutions-white	4,262,414	5,847,742	1,585,328	59.0
All institutions-minority	864,231	1,846,591	982,360	36.6
All institutions-nonresident alien	64,579	183,609	119,030	4.4

NOTE:"Women's colleges" refers to 76 institutions identified as women's colleges in 1993.These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

*Totals for 1976 differ by approximately 10,000 due to students who did not identify by race. They are .2 percent of the 5.2 million female students enrolled in higher education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1995, "Fall Enrollment in Higher Education Survey," and Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" surveys; unpublished data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI)

Appendix table 5— Fall enrollment at women's colleges, by sex and status: 1976

Institution name	Total	Men full-time	Men part-time	Women full-time	Women part-time
Total enrollment for all women's colleges	**88,352**	**3,035**	**2,410**	**64,768**	**18,139**
Total enrollment for private 4-year women's colleges	**68,287**	**1,050**	**2,069**	**51,267**	**13,901**
Agnes Scott College	572	0	0	533	39
Alverno College	857	1	13	534	309
Barnard College	1,941	0	0	1,908	33
Bennett College	618	0	0	602	16
Blue Mountain College	286	68	29	158	31
Brenau College	618	78	15	450	75
Bryn Mawr College	1,589	106	83	1,161	239
Carlow College	903	19	13	705	166
Cedar Crest College	745	0	2	626	117
Chatham College	594	0	0	491	103
Chestnut Hill College	946	2	26	647	271
College of New Rochelle	3,494	286	208	1,725	1,275
College of Notre Dame Maryland	792	1	30	493	268
College of Our Lady of the Elms	447	0	0	412	35
College of Saint Benedict	1,870	0	24	1,535	311
College of Saint Catherine	1,985	0	5	1,889	91
College of Saint Elizabeth	748	1	9	553	185
College of Saint Mary	550	31	11	401	107
Columbia College	882	7	3	805	67
Converse College	866	19	11	771	65
Emmanuel College	1,185	3	13	587	582
Georgian Court College	952	4	61	576	311
Hollins College	530	16	21	397	96
Hood College	1,565	57	169	938	401
Immaculata College	1,107	6	112	517	472
Judson College	372	0	0	292	80
Lesley College	1,903	23	85	985	810
Mary Baldwin College	561	4	0	540	17
Marymount College	1,014	25	3	901	85
Marymount Manhattan College	2,082	16	70	654	1,342
Meredith College	1,542	0	44	1,295	203
Mills College	989	24	3	900	62
Moore College of Art	548	0	0	462	86
Mount Holyoke College	1,952	6	3	1,923	20
Mount Mary College	1,125	0	6	807	312
Mount Saint Mary's College	1,066	9	40	793	224
Mount Vernon College	443	0	0	416	27
Notre Dame College	517	2	31	303	181
Randolph-Macon Woman's College	756	3	2	714	37
Regis College	853	0	11	669	173
Rosemont College	664	0	2	521	141
Russell Sage College Main Campus	3,561	25	665	1,304	1,567
Saint Joseph College	1,039	1	57	634	347
Saint Mary-of-the-Woods College	605	0	0	462	143
Saint Mary's College (IN)	1,822	4	8	1,767	43
Salem College	597	2	4	540	51
Scripps College	567	0	0	559	8
Seton Hill College	919	1	15	780	123
Simmons College	2,683	133	0	1,820	730
Smith College	2,895	20	4	2,840	31
Spelman College	1,289	0	0	1,276	13
Stephens College	1,999	30	38	1,657	274
Sweet Briar College	635	0	0	633	2
Trinity College (DC)	981	1	83	441	456
Trinity College (VT)	472	9	25	355	83
Ursuline College	833	2	4	513	314
Wellesley College	2,093	5	2	1,938	148
Wells College	514	0	4	501	9
Wesleyan College	563	0	2	507	54
William Woods College	915	0	0	908	7
Wilson College	276	0	0	243	33
Total Enrollment for Public Women's Colleges	**11,740**	**234**	**218**	**7,472**	**3,816**
Mississippi University for Women	3,010	0	0	2,370	640
Texas Woman's University	8,730	234	218	5,102	3,176
Total enrollment for private 2-year women's colleges	**8,325**	**1,751**	**123**	**6,029**	**422**
Aquinas Junior College at Newton	315	0	0	315	0
Aquinas Junior College Main Campus	370	0	0	370	0
Bay Path Junior College	617	0	0	603	14
Cottey College	356	0	0	354	2
Endicott College	845	0	0	825	20
Fisher Junior College	2,285	1,751	81	414	39
Harcum Junior College	863	0	7	751	105
Lasell Junior College	654	0	0	630	24
Midway College	333	0	0	304	29
Peace College	525	0	0	519	6
Pine Manor Junior College	583	0	35	377	171
Saint Mary's College (NC)	286	0	0	280	6
Southern SeminaryJunior College	293	0	0	287	6

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey "Fall Enrollment in Higher Education" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 6—Fall enrollment at women's colleges, by sex and race/ethnicity:1976

Institution Name	Total	Woman Total	White	Black	Hispanic	Asian	American Indian	Nonresident alien	Men Total
Total enrollment for all women's colleges	**88,352**	**82,907**	**70,658**	**7,636**	**1,757**	**801**	**445**	**1,609**	**5,445**
Total enrollment for private 4-year women's colleges	**68,287**	**65,168**	**56,222**	**5,812**	**1,176**	**659**	**79**	**1,220**	**3,119**
Agnes Scott College	572	572	518	18	14	0	0	22	0
Alverno College	857	843	771	48	12	6	2	4	14
Barnard College	1,941	1,941	1,588	87	62	152	2	50	0
Bennett College	618	618	0	615	0	3	0	0	0
Blue Mountain College	286	189	177	9	1	1	0	1	97
Brenau College	618	525	503	15	2	2	2	1	93
Bryn Mawr College	1,589	1,400	1,244	71	11	15	0	59	189
Carlow College	903	871	751	99	10	11	0	0	32
Cedar Crest College	745	743	708	24	6	3	0	2	2
Chatham College	594	594	526	64	1	3	0	0	0
Chestnut Hill College	946	918	804	40	58	1	0	15	28
College of New Rochelle	3,494	3,000	2,439	430	76	19	11	25	494
College of Notre Dame Maryland	792	761	669	50	18	2	0	22	31
College of Our Lady of the Elms	447	447	430	11	6	0	0	0	0
College of Saint Benedict	1,870	1,846	1,678	6	5	2	3	152	24
College of Saint Catherine	1,985	1,980	1,896	14	17	7	20	26	5
College of Saint Elizabeth	748	738	641	56	23	3	0	15	10
College of Saint Mary	550	508	484	17	3	1	0	3	42
Columbia College	882	872	769	95	3	0	1	4	10
Converse College	866	836	815	20	0	1	0	0	30
Emmanuel College	1,185	1,169	1,088	47	12	2	0	20	16
Georgian Court College	952	887	792	49	28	4	0	14	65
Hollins College	530	493	459	16	9	0	0	9	37
Hood College	1,565	1,339	1,288	37	1	6	2	5	226
Immaculata College	1,107	989	933	31	8	4	0	13	118
Judson College	372	372	354	18	0	0	0	0	0
Lesley College	1,903	1,795	1,692	71	12	7	1	12	108
Mary Baldwin College	561	557	533	12	7	0	0	5	4
Marymount College	1,014	986	818	89	46	0	0	33	28
Marymount Manhattan College	2,082	1,996	1,310	469	163	53	1	0	86
Meredith College	1,542	1,498	1,469	22	3	1	0	3	44
Mills College	989	962	699	99	45	75	1	43	27
Moore College of Art	548	548	497	32	9	6	0	4	0
Mount Holyoke College	1,952	1,943	1,710	108	25	24	1	75	9
Mount Mary College	1,125	1,119	1,051	41	8	1	4	14	6
Mount Saint Mary's College	1,066	1,017	716	75	147	55	5	19	49
Mount Vernon College	443	443	365	34	5	1	0	38	0
Notre Dame College	517	484	449	21	7	2	0	5	33
Randolph-Macon Woman's College	756	751	707	20	6	1	0	17	5
Regis College	853	842	807	11	12	4	1	7	11
Rosemont College	664	662	611	15	9	2	0	25	20
Russell Sage College Main Campus	3,561	2,871	2,555	197	105	3	2	9	690
Saint Joseph College	1,039	981	944	18	10	2	2	5	58
Saint Mary-of-the-Woods College	605	605	486	37	10	7	3	62	0
Saint Mary's College (IN)	1,822	1,810	1,749	16	11	9	0	25	12
Salem College	597	591	574	2	5	0	2	8	6
Scripps College	567	567	479	27	18	20	0	23	0
Seton Hill College	919	903	858	33	5	7	0	0	16
Simmons College	2,683	2,550	2,276	189	13	27	0	45	133
Smith College	2,895	2,871	2,644	135	14	30	0	48	24
Spelman College	1,289	1,289	0	1,260	0	0	0	29	0
Stephens College	1,999	1,931	1,847	52	8	6	2	16	68
Sweet Briar College	635	635	609	6	3	2	0	15	0
Trinity College (DC)	981	897	413	436	35	8	0	5	84
Trinity College (VT)	472	438	432	0	0	0	0	6	34
Ursuline College	833	827	782	32	3	5	2	3	6
Wellesley College	2,093	2,086	1,716	159	30	51	5	125	7
Wells College	514	510	470	20	12	2	3	3	4
Wesleyan College	563	561	509	34	1	0	1	16	2
William Woods College	915	915	865	41	2	0	0	7	0
Wilson College	276	276	255	12	1	0	0	8	0
Total Enrollment for Public Women's Colleges	**11,740**	**11,288**	**8,658**	**1,624**	**534**	**130**	**47**	**295**	**452**
Mississippi University for Women	3,010	3,010	2,397	460	0	1	1	151	0
Texas Woman's University	8,730	8,278	6,261	1,164	534	129	46	144	452
Total Enrollment for Private 2-year Women's Colleges	**8,325**	**8,451**	**5,778**	**200**	**47**	**12**	**320**	**94**	**1,874**
Aquinas Junior College at Newton	315	315	0	3	0	0	312	0	0
Aquinas Junior College Main Campus	370	370	365	3	0	1	0	1	0
Bay Path Junior College	617	617	591	12	2	0	0	12	0
Cottey College	356	356	345	1	4	0	2	4	0
Endicott College	845	845	829	4	0	0	0	12	0
Fisher Junior College	2,285	453	400	33	8	0	2	10	1,832
Harcum Junior College	863	856	746	101	4	2	1	2	7
Lasell Junior College	654	654	636	7	0	0	0	11	0
Midway College	333	333	289	26	0	1	0	17	0
Peace College	525	525	516	3	1	1	3	1	0
Pine Manor Junior College	583	548	495	5	27	6	0	15	35
Saint Mary's College (NC)	286	286	281	0	1	1	0	3	0
Southern Seminary Junior College	293	293	285	2	0	0	0	6	0

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey, "Fall Enrollment in Higher Education" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 7—Fall enrollment at women's colleges, by age, sex, and level: 1989

Institution name	Total women undergraduates	Undergraduate Women								
		Under 18	18-19	20-21	22-24	25-29	30-34	35-39	40-49	50-64	65 and over
Total enrollment for all women's colleges	**86,131**	**1,746**	**26,381**	**21,458**	**9,074**	**7,226**	**5,962**	**5,548**	**6,587**	**1,887**	**262**
Total enrollment for private 4-year women's colleges	**73,931**	**1,556**	**22,573**	**19,266**	**7,300**	**5,712**	**4,957**	**4,784**	**5,823**	**1,717**	**243**
Agnes Scott College	591	23	272	171	29	20	8	24	37	6	1
Alverno College	2,277	12	204	195	222	394	388	392	391	77	2
Barnard College	2,121	41	941	968	157	11	2	1	—	—	—
Bennett College	572	25	269	185	79	11	2	—	1	—	—
Blue Mountain College	301	2	49	78	34	46	38	29	19	6	—
Brenau College	1,004	3	246	200	110	101	108	103	110	23	—
Bryn Mawr College	1,280	110	600	440	55	20	12	14	18	9	2
Carlow College	876	24	148	144	87	80	101	102	150	40	—
Cedar Crest College	912	—	201	212	85	80	110	100	110	14	—
Chatham College	659	19	164	124	37	49	71	67	100	27	1
Chestnut Hill College	716	24	164	167	66	76	78	47	83	11	0
College of New Rochelle	3,086	—	346	436	327	362	379	371	412	325	128
College of Notre Dame Maryland	2,172	5	342	268	139	237	254	332	458	129	8
College of Our Lady of the Elms	966	24	245	208	74	86	87	92	122	20	8
College of Saint Benedict	1,958	3	805	838	198	31	20	19	35	8	1
College of Saint Catherine	2,429	31	463	564	364	267	233	204	244	45	14
College of Saint Elizabeth	1,002	18	201	183	113	116	80	76	157	55	3
College of Saint Mary	996	—	170	164	89	142	126	157	122	25	1
Columbia College	1,171	6	253	418	309	79	44	28	27	7	0
Converse College	905	5	256	356	189	34	26	23	13	3	0
Emmanuel College	808	2	245	242	67	70	104	47	21	10	—
Endicott College	954	1	650	196	38	32	5	16	8	8	0
Georgian Court College	1,430	20	270	319	213	143	121	131	174	35	4
Hollins College	914	5	432	375	44	9	12	13	17	7	—
Hood College	1,060	15	347	302	99	75	69	77	63	12	1
Immaculata College	1,552	16	281	259	193	180	174	164	225	47	13
Judson College	366	6	174	109	10	11	16	17	17	5	1
Lesley College	1,290	27	132	262	210	137	141	129	194	58	—
Mary Baldwin College	1,055	55	356	258	70	68	62	74	93	16	3
Marymount College	1,094	4	327	344	100	92	67	54	75	31	—
Marymount Manhattan College	1,160	10	178	176	136	168	121	103	191	74	3
Meredith College	1,974	21	771	668	170	100	66	70	84	21	3
Midway College	511	3	178	57	28	77	51	53	50	13	1
Mills College	1,038	25	304	236	75	47	29	21	30	7	—
Moore College of Art	678	—	236	265	116	37	15	7	0	2	—
Mount Holyoke College	1,961	98	964	742	57	21	27	24	25	2	1
Mount Mary College	1,386	19	193	279	212	230	139	129	154	28	3
Mount Saint Mary's College	897	4	289	278	165	84	33	20	14	8	2
Mount Vernon College	549	4	173	183	66	39	31	19	26	8	0
Notre Dame College	822	7	91	73	46	118	139	124	182	38	4
Pine Manor College	598	5	260	244	78	11	0	0	0	0	0
Randolph-Macon Woman's College	731	25	359	262	40	7	8	10	11	8	1
Regis College	1,069	4	446	475	74	18	12	7	24	9	—
Rosemont College	574	25	121	135	154	45	43	25	15	11	—
Russell Sage College Main Campus	2,278	13	675	519	238	228	202	178	186	35	4
Saint Joseph College	1,030	5	95	117	302	99	103	111	177	21	—
Saint Mary-of-the-Woods College	833	—	142	134	10	86	188	120	122	26	5
Saint Mary's College (IN)	1,756	75	857	765	34	12	1	5	6	1	—
Salem College	789	15	225	186	41	64	67	73	86	29	3
Scripps College	617	7	277	279	39	7	2	2	3	—	1
Seton Hill College	904	4	288	183	77	65	72	80	104	30	1
Simmons College	1,578	3	535	618	281	60	34	16	25	6	—
Smith College	2,675	83	1,233	901	120	66	79	62	96	33	2
Spelman College	1,742	469	582	386	166	77	28	14	15	3	2
Stephens College	1,121	24	397	320	73	42	46	69	105	44	1
Sweet Briar College	576	4	274	228	45	4	5	6	10	—	—
Trinity College (DC)	932	1	48	139	88	412	103	83	47	10	1
Trinity College (VT)	916	1	183	206	97	121	93	92	95	24	4
Ursuline College	1,411	11	153	175	152	156	148	219	288	107	2
Wellesley College	460	96	25	25	29	47	19	1			
Wells College	438	3	209	169	26	10	4	12	4	1	—
Wesleyan College	494	32	272	75	20	18	27	27	16	7	0
William Woods College	741	6	311	290	71	14	18	14	11	5	1
Wilson College	581	18	91	58	100	85	60	57	78	28	6
Total Enrollment for Public Women's Colleges	**6,527**	**14**	**1,130**	**1,390**	**1,345**	**989**	**608**	**497**	**458**	**84**	**12**
Mississippi University for Women	1,688	5	386	361	254	225	182	123	121	23	8
Texas Woman's University	4,839	9	744	1,029	1,091	764	426	374	337	61	4
Total Enrollment for Private 2-year Women's Colleges	**5,673**	**176**	**2,678**	**802**	**429**	**525**	**397**	**267**	**306**	**86**	**7**
Aquinas Junior College at Milton	379	13	181	26	5	39	44	25	30	16	—
Aquinas Junior College at Newton	225	1	102	61	27	17	10	2	1	4	0
Bay Path College	575	30	446	52	16	6	9	6	10	—	—
Cottey College	350	0	74	81	46	77	28	25	18	1	0
Fisher College	1,854	6	281	248	241	340	272	189	220	53	4
Harcum Junior College	735	5	377	172	64	40	27	17	23	8	2
Lasell Junior College	451	13	329	83	16	2	4	0	1	2	1
Peace College	513	25	463	13	3	1	1	2	3	2	0
Saint Mary's College (NC)	306	60	216	27	3	—	—	—	—	—	—
Southern Seminary College	285	23	209	39	8	3	2	1	—	—	—

NOTE: Age unidentified students were estimated proportionally by institution. "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 8—Fall enrollment at women's colleges, by sex and attendance status: 1993

Institution name	Total	Men full-time	Men part-time	Women full-time	Women part-time
Total enrollment for all women's colleges	**118,880**	**3,846**	**5,987**	**68,234**	**40,813**
Total enrollment for private 4-year women's colleges	**100,899**	**3,068**	**5,039**	**58,807**	**33,985**
Agnes Scott College	600	3	1	526	70
Alverno College	2,557	7	37	1,304	1,209
Barnard College	2,197	0	0	2,136	61
Bay Path College	578	0	0	489	89
Bennett College	664	0	1	650	13
Blue Mountain College	390	53	18	210	109
Brenau University	2,120	240	289	1,002	589
Bryn Mawr College	1,810	80	62	1,405	263
Carlow College	1,865	74	75	735	981
Cedar Crest College	1,543	12	67	777	687
Chatham College	623	4	18	469	132
Chestnut Hill College	1,151	0	98	508	545
College of New Rochelle	6,100	549	276	3,360	1,915
College of Notre Dame Maryland	3,077	2	249	669	2,157
College of Our Lady of the Elms	1,164	14	66	556	528
College of Saint Benedict	1,818	0	7	1,715	96
College of Saint Catherine	2,588	18	44	1,790	736
College of Saint Elizabeth	1,484	3	152	506	823
College of Saint Mary	1,168	13	61	485	609
Columbia College	1,249	0	0	963	286
Converse College	1,121	22	45	718	336
Emmanuel College	1,332	14	118	664	536
Endicott College	963	4	34	661	264
Georgian Court College	2,580	68	222	1,054	1,236
Hollins College	1,059	19	34	832	174
Hood College	2,061	56	429	702	874
Immaculata College	2,348	22	275	542	1,509
Judson College	320	1	19	262	38
Lasell College	529	0	2	470	57
Lesley College	5,871	497	602	1,464	3,308
Mary Baldwin College	1,327	36	67	830	394
Marymount College	1,101	40	67	691	303
Marymount Manhattan College	1,773	190	74	798	711
Meredith College	2,345	0	21	1,725	599
Midway College	943	7	20	520	396
Mills College	1,138	50	5	993	90
Moore College of Art and Design	362	0	0	341	21
Mount Holyoke College	1,951	2	1	1,902	46
Mount Mary College	1,533	0	8	939	586
Mount Saint Mary's College	1,535	55	88	1,058	334
Mount Vernon College	378	3	3	210	162
Notre Dame College	794	0	6	377	411
Pine Manor College	400	0	0	372	28
Randolph-Macon Woman's College	709	0	2	649	58
Regis College	1,160	0	37	581	542
Rosemont College	585	4	26	406	149
Russell Sage College-Main Campus	4,217	587	473	1,677	1,480
Saint Joseph College	2,022	8	146	617	1,251
Saint Mary-of-the-Woods College	1,187	2	31	339	815
Saint Mary's College (IN)	1,466	0	3	1,439	24
Salem College	830	12	28	536	254
Scripps College	576	0	0	569	7
Seton Hill College	962	47	23	705	187
Simmons College	3,334	87	161	1,695	1,391
Smith College	2,937	50	10	2,733	144
Spelman College	2,065	0	0	1,973	92
Stephens College	987	15	28	617	327
Sweet Briar College	570	2	9	525	34
Trinity College (DC)	1,235	1	37	349	848
Trinity College (VT)	1,099	42	152	442	463
Ursuline College	1,563	33	48	685	797
Wellesley College	2,351	2	6	2,193	150
Wells College	415	1	0	397	17
Wesleyan College	428	0	1	382	45
William Woods College	816	0	0	736	80
Wilson College	875	17	157	182	519
Total enrollment for public women's colleges	**12,287**	**613**	**700**	**5,981**	**4,993**
Mississippi University for Women	2,585	283	236	1,339	727
Texas Woman's University	9,702	330	464	4,642	4,266
Total Enrollment for Private 2-year Women's Colleges	**5,694**	**165**	**248**	**3,446**	**1,835**
Aquinas College at Milton	349	0	4	159	186
Aquinas College at Newton	303	4	3	166	130
Cottey College	370	0	0	363	7
Fisher College	3,011	120	190	1,460	1,241
Harcum Junior College	736	41	51	480	164
Peace College	447	0	0	423	24
Saint Mary's College (NC)	299	0	0	222	77
Southern Virginia College for Women	179	0	0	173	6

NOTE: 'Women's colleges' refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) 'Fall Enrollment' survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 9—Fall enrollment at women's colleges, by sex and race/ethnicity: 1993

Institution Name	Total	Women Total	White	Black	Hispanic	Asian	American Indian	Nonresident alien	Men Total
Total enrollment for all women's colleges	**118,880**	**109,047**	**84,048**	**13,268**	**4,441**	**4,032**	**385**	**2,873**	**9,833**
Total enrollment for private 4-year women's colleges	**100,899**	**92,792**	**71,040**	**11,508**	**3,710**	**3,732**	**307**	**2,495**	**8,107**
Agnes Scott College	600	596	469	78	17	14	1	17	4
Alverno College	2,587	2,513	1,944	375	131	33	17	13	44
Barnard College	2,197	2,197	1,367	89	131	587	7	16	0
Bay Path College	578	578	490	26	17	6	0	39	0
Bennett College	664	663	0	645	2	0	0	16	1
Blue Mountain College	390	319	282	36	0	0	0	1	71
Brenau University	2,120	1,591	1,295	255	8	11	0	22	529
Bryn Mawr College	1,810	1,668	1,213	93	52	185	2	123	142
Carlow College	1,865	1,716	1,494	177	12	6	12	15	149
Cedar Crest College	1,543	1,464	1,407	8	20	29	0	0	79
Chatham College	623	601	531	43	6	5	0	16	22
Chestnut Hill College	1,151	1,053	877	77	54	25	0	20	98
College of New Rochelle	6,100	5,275	1,860	2,617	684	88	26	0	825
College of Notre Dame Maryland	3,077	2,826	2,280	402	37	50	0	57	251
College of Our Lady of the Elms	1,164	1,084	981	39	41	8	0	15	80
College of Saint Benedict	1,818	1,811	1,709	4	19	32	5	42	7
College of Saint Catherine	2,588	2,526	2,272	48	32	81	30	63	62
College of Saint Elizabeth	1,484	1,329	990	101	141	45	5	47	155
College of Saint Mary	1,168	1,094	1,045	30	10	8	1	0	74
Columbia College	1,249	1,249	934	295	7	8	2	3	0
Converse College	1,121	1,054	962	67	8	9	1	7	67
Emmanuel College	1,332	1,200	896	117	46	62	2	77	132
Endicott College	963	925	751	53	43	12	9	57	38
Georgian Court College	2,580	2,290	2,105	76	65	18	25	1	290
Hollins College	1,059	1,006	902	50	18	11	3	22	53
Hood College	2,061	1,576	1,295	142	36	44	1	58	485
Immaculata College	2,348	2,051	1,880	64	28	36	0	43	297
Judson College	320	300	267	25	0	1	1	6	20
Lasell College	529	527	425	22	28	10	0	42	2
Lesley College	5,871	4,772	4,138	176	105	85	16	252	1,099
Mary Baldwin College	1,327	1,224	1,123	62	13	20	3	3	103
Marymount College	1,101	994	595	174	132	44	5	43	107
Marymount Manhattan College	1,773	1,509	806	327	255	71	3	47	264
Meredith College	2,345	2,324	2,124	105	8	21	7	59	21
Midway College	943	916	820	66	16	2	3	9	27
Mills College	1,138	1,083	789	74	60	95	9	56	55
Moore College of Art and Design	362	362	288	32	12	30	0	0	0
Mount Holyoke College	1,951	1,948	1,378	74	67	152	8	269	3
Mount Mary College	1,533	1,525	1,401	68	19	20	3	14	8
Mount Saint Mary's College	1,535	1,392	526	115	509	231	9	2	143
Mount Vernon College	378	372	233	57	23	16	0	43	6
Notre Dame College	794	788	529	228	13	11	2	5	6
Pine Manor College	400	400	258	28	15	13	0	86	0
Randolph-Macon Woman's College	709	707	592	35	16	22	3	39	2
Regis College	1,160	1,123	992	31	37	29	0	34	37
Rosemont College	585	555	503	20	9	18	0	5	30
Russell Sage College-Main Campus	4,217	3,157	2,861	166	66	51	10	3	1,060
Saint Joseph College	2,022	1,868	1,690	105	40	27	3	3	154
Saint Mary-of-the-Woods College	1,187	1,154	1,087	38	9	1	5	14	33
Saint Mary's College (IN)	1,466	1,463	1,354	15	35	31	5	23	3
Salem College	830	790	723	40	4	6	4	13	40
Scripps College	576	576	378	29	55	86	2	26	0
Seton Hill College	962	892	785	43	39	12	1	12	70
Simmons College	3,334	3,086	2,528	197	80	139	9	133	248
Smith College	2,937	2,877	2,144	106	112	322	10	183	60
Spelman College	2,065	2,065	1	2,010	0	0	0	54	0
Stephens College	987	944	849	54	19	12	10	0	43
Sweet Briar College	570	559	504	19	10	9	0	17	11
Trinity College (DC)	1,235	1,197	608	479	57	35	2	16	38
Trinity College (VT)	1,099	905	881	2	3	3	8	8	194
Ursuline College	1,563	1,482	1,204	237	9	15	2	15	81
Wellesley College	2,351	2,343	1,272	162	128	634	9	138	8
Wells College	415	414	345	19	14	27	4	5	1
Wesleyan College	428	427	339	48	11	14	0	15	1
William Woods College	816	816	794	7	11	4	0	0	0
Wilson College	875	701	674	6	6	0	2	13	174
Total Enrollment for Public Women's Colleges	**12,287**	**10,974**	**8,465**	**1,450**	**594**	**206**	**50**	**209**	**1,313**
Mississippi University for Women	2,585	2,066	1,592	443	10	14	3	4	519
Texas Woman's University	9,702	8,908	6,873	1,007	584	192	47	205	794
Total Enrollment for Private 2-year Women's Colleges	**5,694**	**5,281**	**4,543**	**310**	**137**	**94**	**28**	**169**	**413**
Aquinas College at Milton	349	345	331	7	3	3	1	0	4
Aquinas College at Newton	303	296	262	17	11	6	0	0	7
Cottey College	370	370	322	0	7	6	2	33	0
Fisher College	3,011	2,701	2,250	198	106	56	23	68	310
Harcum Junior College	736	644	518	63	5	13	0	45	92
Peace College	447	447	429	8	0	3	1	6	0
Saint Mary's College (NC)	299	299	280	3	2	1	0	13	0
Southern Virginia College for Women	179	179	151	14	3	6	1	4	0

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 10—Fall enrollment at women's colleges, by age, sex, and level: 1993

Institution name	Total women undergraduates	Undergraduate Women									
		Under 18	18-19	20-21	22-24	25-29	30-34	35-39	40-49	50-64	65 and over
Total enrollment for all women's colleges	**90,699**	**1,575**	**23,068**	**21,137**	**11,230**	**8,410**	**6,834**	**6,652**	**9,038**	**2,503**	**252**
Total enrollment for private 4-year women's colleges	**77,984**	**1,422**	**20,373**	**18,882**	**9,002**	**6,729**	**5,584**	**5,628**	**7,904**	**2,220**	**240**
Agnes Scott College	572	7	220	179	75	17	13	18	32	11	—
Alverno College	2,279	3	196	293	319	384	320	307	389	66	2
Barnard College	2,197	34	987	953	201	13	5	1	2	1	—
Bay Path College	578	9	276	139	57	31	28	17	15	6	—
Bennett College	663	2	242	244	123	28	5	4	8	7	—
Blue Mountain College	319	1	49	93	55	35	36	22	26	2	—
Brenau University	1,123	15	164	203	219	144	115	115	125	22	1
Bryn Mawr College	1,230	101	502	430	79	37	16	13	33	16	3
Carlow College	1,671	32	251	200	144	188	212	237	340	63	4
Cedar Crest College	1,464	22	344	266	150	164	147	151	178	38	4
Chatham College	601	9	142	141	69	56	35	61	75	13	—
Chestnut Hill College	706	18	219	168	76	58	35	39	66	25	2
College of New Rochelle	3,960	7	237	294	495	668	583	532	751	325	68
College of Notre Dame Maryland	2,453	3	300	227	166	270	317	380	626	157	7
College of Our Lady of the Elms	915	16	173	174	95	92	107	85	132	35	6
College of Saint Benedict	1,811	37	863	673	128	25	29	27	21	5	3
College of Saint Catherine	2,230	7	371	455	430	277	190	243	223	32	2
College of Saint Elizabeth	1,308	21	195	170	130	173	128	119	256	102	14
College of Saint Mary	1,094	—	145	154	138	134	141	143	202	33	4
Columbia College	1,211	25	371	327	150	95	74	65	77	22	5
Converse College	736	4	332	333	55	3	2	2	2	3	—
Emmanuel College	1,065	11	237	227	146	124	90	95	99	35	1
Endicott College	925	26	423	213	105	63	30	34	27	4	—
Georgian Court College	1,694	14	243	406	290	211	141	148	181	54	6
Hollins College	863	21	349	308	53	25	28	24	40	13	2
Hood College	951	9	259	237	113	79	75	69	93	17	0
Immaculata College	1,576	38	218	232	200	239	157	187	233	60	12
Judson College	300	4	106	129	11	6	11	13	18	2	—
Lasell College	527	28	103	214	120	33	9	9	11	—	—
Lesley College	1,305	12	61	212	205	148	152	147	298	70	0
Mary Baldwin College	1,132	69	301	232	128	76	79	80	140	26	1
Marymount College	994	6	174	203	127	132	112	108	100	31	1
Marymount Manhattan College	1,509	10	250	239	223	238	150	126	180	84	9
Meredith College	2,170	54	715	680	258	150	75	81	130	27	—
Midway College	916	2	150	131	130	144	121	115	103	17	3
Mills College	824	27	220	230	141	90	46	22	38	8	2
Moore College of Art and Design	362	1	138	114	69	19	10	3	8	—	—
Mount Holyoke College	1,931	104	889	681	114	44	24	28	39	8	—
Mount Mary College	1,415	4	182	214	248	243	156	144	186	34	4
Mount Saint Mary's College	1,158	6	337	293	202	118	57	52	69	20	4
Mount Vernon College	338	—	27	72	88	57	23	24	39	8	—
Notre Dame College	746	13	70	81	83	91	116	103	151	37	1
Pine Manor College	400	15	143	75	157	9	1	—	—	—	—
Randolph-Macon Woman's College	707	22	306	253	40	20	11	21	25	8	1
Regis College	1,078	2	357	346	117	66	42	41	77	30	—
Rosemont College	498	17	174	159	51	26	12	10	34	14	1
Russell Sage College-Main Campus	2,262	12	632	467	285	259	216	162	192	32	5
Saint Joseph College	1,194	85	79	223	137	120	131	126	220	71	2
Saint Mary-of-the-Woods College	1,099	—	40	107	111	96	138	164	316	119	8
Saint Mary's College (IN)	1,463	73	732	585	50	5	4	4	8	1	1
Salem College	716	17	208	117	60	72	58	80	77	23	4
Scripps College	576	36	274	207	45	8	—	—	4	2	—
Seton Hill College	892	11	262	277	124	39	44	49	68	15	3
Simmons College	1,299	13	473	485	158	67	39	30	25	9	0
Smith College	2,574	37	1,080	1,052	147	22	53	72	76	34	1
Spelman College	2,065	48	734	635	254	127	88	73	77	22	7
Stephens College	944	31	257	227	87	42	46	76	120	58	—
Sweet Briar College	559	16	260	193	27	4	9	7	13	4	26
Trinity College (DC)	945	4	106	97	81	99	122	131	234	69	2
Trinity College (VT)	843	4	133	171	115	85	95	99	122	18	1
Ursuline College	1,347	11	160	167	193	183	123	141	271	95	3
Wellesley College	2,343	99	1,090	887	102	42	28	30	39	23	3
Wells College	414	3	182	128	41	9	21	10	13	6	1
Wesleyan College	427	14	185	145	34	12	11	11	13	2	—
William Woods College	816	7	292	245	97	34	42	47	46	6	—
Wilson College	701	13	183	170	81	61	50	51	72	20	0
Total Enrollment at Public Women's Colleges	**7,434**	**24**	**1,001**	**1,574**	**1,661**	**996**	**725**	**589**	**674**	**178**	**12**
Mississippi University for Women	1,947	12	357	524	347	216	151	135	134	63	8
Texas Woman's University	5,487	12	644	1,050	1,314	780	574	454	540	115	4
Total Enrollment at Private 2-year Women's Colleges	**5,281**	**129**	**1,694**	**681**	**567**	**685**	**525**	**435**	**460**	**105**	**0**
Aquinas College at Milton	345	—	77	50	29	47	33	38	66	5	—
Aquinas College at Newton	296	2	101	47	44	39	16	18	25	4	—
Cottey College	370	37	297	25	7	—	2	2	—	—	—
Fisher College	2,701	4	330	293	366	527	426	337	333	85	0
Harcum Junior College	644	—	196	154	104	67	47	40	28	8	—
Peace College	447	19	393	19	4	3	—	—	6	3	—
Saint Mary's College (NC)	299	62	177	55	5	—	—	—	—	—	—
Southern Virginia College for Women	179	5	123	38	8	2	1	—	2	—	—

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 11— Female undergraduate enrollment at private 4–year women's colleges, by Carnegie classification and age: Fall 1993

Carnegie classification and institution name	Total women undergraduates	Under 25	25 and over
Total enrollment for Baccalaureate I women's colleges	**20,710**	**18,195**	**2,515**
Agnes Scott College	572	481	91
Barnard College	2,197	2,175	22
Bryn Mawr College	1,230	1,112	118
Chatham College	601	361	240
College of Saint Benedict	1,811	1,701	110
Hollins College	863	731	132
Judson College	300	250	50
Mills College	824	618	206
Mount Holyoke College	1,931	1,788	143
Randolph-Macon Woman's College	707	621	86
Salem College	716	402	314
Scripps College	576	562	14
Smith College	2,574	2,316	258
Spelman College	2,065	1,671	394
Sweet Briar College	559	496	63
Wellesley College	2,343	2,178	165
Wells College	414	354	60
Wesleyan College	427	378	49
Total enrollment for Baccalaureate II women's colleges	**29,507**	**16,631**	**12,876**
Alverno College	2,279	811	1,468
Bennett College	663	611	52
Blue Mountain College	319	198	121
Carlow College	1,671	627	1,044
Cedar Crest College	1,464	782	682
College of Our Lady of the Elms	915	458	457
College of Saint Elizabeth	1,308	516	792
College of Saint Mary	1,094	437	657
Columbia College	1,211	873	338
Endicott College	925	767	158
Lasell College	527	465	62
Mary Baldwin College	1,132	730	402
Marymount College	994	510	484
Marymount Manhattan College	1,509	722	787
Midway College	916	413	503
Mount Mary College	1,415	648	767
Mount Vernon College	338	187	151
Notre Dame College	746	247	499
Pine Manor College	400	390	10
Regis College	1,078	822	256
Rosemont College	498	401	97
Saint Mary-of-the-Woods College	1,099	258	841
Saint Mary's College (IN)	1,463	1,440	23
Seton Hill College	892	674	218
Stephens College	944	602	342
Trinity College (VT)	843	423	420
Ursuline College	1,347	531	816
William Woods College	816	641	175
Wilson College	701	447	254
Total enrollment for Master's I women's colleges	**20,280**	**10,772**	**9,508**
Brenau University	1,123	601	522
College of New Rochelle	3,960	1,033	2,927
Converse College	736	724	12
Emmanuel College	1,065	621	444
Georgian Court College	1,694	953	741
Hood College	951	618	333
Immaculata College	1,576	688	888
Lesley College	1,305	490	815
Meredith College	2,170	1,707	463
Russell Sage College-Main Campus	2,262	1,396	866
Saint Joseph College	1,194	524	670
Simmons College	1,299	1,129	170
Trinity College (DC)	945	288	657
Total enrollment for Master's II women's colleges	**6,547**	**3,278**	**3,269**
Chestnut Hill College	706	481	225
College of Notre Dame Maryland	2,453	696	1,757
College of Saint Catherine	2,230	1,263	967
Mount Saint Mary's College	1,158	838	320

NOTE: "Private 4-year women's colleges" refers to 64 private 4-year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. Data for women's colleges estimated in order to include students not identified by age. Estimations were made based on proportions by institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data, tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

Appendix table 12— Female undergraduate enrollment at private 4–year women's colleges, by Carnegie classification and race/ethnicity: Fall 1993

Carnegie classification and institution name	Total women undergraduates	White	Black	Hispanic	Asian	American Indian	Nonresident alien
Total enrollment for Baccalaureate I women's colleges	**20,710**	**13,870**	**2,918**	**694**	**2,165**	**65**	**998**
Agnes Scott College	572	452	71	17	14	1	17
Barnard College	2,197	1,367	89	131	587	7	16
Bryn Mawr College	1,230	845	60	48	175	2	100
Chatham College	601	531	43	6	5	0	16
College of Saint Benedict	1,811	1,709	4	19	32	5	42
Hollins College	863	777	39	16	11	3	17
Judson College	300	267	25	0	1	1	6
Mills College	824	589	57	50	78	7	43
Mount Holyoke College	1,931	1,363	74	66	151	8	269
Randolph-Macon Woman's College	707	592	35	16	22	3	39
Salem College	716	650	39	4	6	4	13
Scripps College	576	378	29	55	86	2	26
Smith College	2,574	1,889	95	103	313	9	165
Spelman College	2,065	1	2,010	0	0	0	54
Sweet Briar College	559	504	19	10	9	0	17
Wellesley College	2,343	1,272	162	128	634	9	138
Wells College	414	345	19	14	27	4	5
Wesleyan College	427	339	48	11	14	0	15
Total enrollment for Baccalaureate II women's colleges	**29,507**	**24,080**	**3,206**	**1,085**	**460**	**97**	**579**
Alverno College	2,279	1,745	358	122	26	17	11
Bennett College	663	0	645	2	0	0	16
Blue Mountain College	319	282	36	0	0	0	1
Carlow College	1,671	1,451	177	12	6	12	13
Cedar Crest College	1,464	1,407	8	20	29	0	0
College of Our Lady of the Elms	915	825	34	37	4	0	15
College of Saint Elizabeth	1,308	973	101	141	41	5	47
College of Saint Mary	1,094	1,045	30	10	8	1	0
Columbia College	1,211	898	293	7	8	2	3
Endicott College	925	751	53	43	12	9	57
Lasell College	527	425	22	28	10	0	42
Mary Baldwin College	1,132	1,031	62	13	20	3	3
Marymount College	994	596	174	132	44	5	43
Marymount Manhattan College	1,509	806	327	255	71	3	47
Midway College	916	820	66	16	2	3	9
Mount Mary College	1,415	1,295	65	19	19	3	14
Mount Vernon College	338	204	54	23	14	0	43
Notre Dame College	746	489	226	13	11	2	5
Pine Manor College	400	258	28	15	13	0	86
Regis College	1,078	950	30	37	27	0	34
Rosemont College	498	449	17	9	18	0	5
Saint Mary-of-the-Woods College	1,099	1,032	38	9	1	5	14
Saint Marys College (IN)	1,463	1,354	15	35	31	5	23
Seton Hill College	892	785	43	39	12	1	12
Stephens College	944	849	54	19	12	10	0
Trinity College (VT)	843	820	2	3	3	7	8
Ursuline College	1,347	1,072	235	9	14	2	15
William Woods College	816	794	7	11	4	0	0
Wilson College	701	674	6	6	0	2	13
Total enrollment for Master's I women's colleges	**20,280**	**14,448**	**3,932**	**1,021**	**446**	**76**	**357**
Brenau University	1,123	939	147	7	9	0	21
College of New Rochelle	3,960	804	2,469	603	62	22	0
Converse College	736	671	42	7	8	1	7
Emmanuel College	1,065	773	110	44	60	2	76
Georgian Court College	1,694	1,529	62	59	18	25	1
Hood College	951	740	121	27	11	1	51
Immaculata College	1,576	1,423	58	24	28	0	43
Lesley College	1,305	1,111	98	41	37	4	14
Meredith College	2,170	2,007	78	8	16	7	54
Russell Sage College-Main Campus	2,262	1,995	151	64	41	8	3
Saint Joseph College	1,194	1,048	87	32	22	2	3
Simmons College	1,299	945	124	56	103	2	69
Trinity College (DC)	945	463	385	49	31	2	15
Total enrollment for Master's II women's colleges	**6,547**	**4,889**	**556**	**582**	**364**	**35**	**121**
Chestnut Hill College	706	549	63	52	22	0	20
College of Notre Dame Maryland	2,453	1,965	351	35	47	0	55
College of Saint Catherine	2,230	2,006	42	32	80	26	44
Mount Saint Mary's College	1,158	369	100	463	215	9	2

NOTE: "Private 4-year women's colleges" refers to 64 private 4-year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 13—Female undergraduate enrollment at private 4–year women's colleges, by Carnegie classification and attendance status: Fall 1993

Carnegie classification and institution name	Total women Undergraduates	Part-time	Full-time
Total enrollment for Baccalaureate I women's colleges	**20,710**	**1,318**	**19,392**
Agnes Scott College	572	62	510
Barnard College	2,197	61	2,136
Bryn Mawr College	1,230	85	1,145
Chatham College	601	132	469
College of Saint Benedict	1,811	96	1,715
Hollins College	863	70	793
Judson College	300	38	262
Mills College	824	43	781
Mount Holyoke College	1,931	40	1,891
Randolph-Macon Woman's College	707	58	649
Salem College	716	193	523
Scripps College	576	7	569
Smith College	2,574	95	2,479
Spelman College	2,065	92	1,973
Sweet Briar College	559	34	525
Wellesley College	2,343	150	2,193
Wells College	414	17	397
Wesleyan College	427	45	382
Total enrollment for Baccalaureate II women's colleges	**29,507**	**11,440**	**18,067**
Alverno College	2,279	999	1,280
Bennett College	663	13	650
Blue Mountain College	319	109	210
Carlow College	1,671	938	733
Cedar Crest College	1,464	687	777
College of Our Lady of the Elms	915	383	532
College of Saint Elizabeth	1,308	818	490
College of Saint Mary	1,094	609	485
Columbia College	1,211	251	960
Endicott College	925	264	661
Lasell College	527	57	470
Mary Baldwin College	1,132	319	813
Marymount College	994	303	691
Marymount Manhattan College	1,509	711	798
Midway College	916	396	520
Mount Mary College	1,415	483	932
Mount Vernon College	338	136	202
Notre Dame College	746	369	377
Pine Manor College	400	28	372
Regis College	1,078	497	581
Rosemont College	498	92	406
Saint Mary-of-the-Woods College	1,099	760	339
Saint Mary's College (IN)	1,463	24	1,439
Seton Hill College	892	187	705
Stephens College	944	327	617
Trinity College (VT)	843	401	442
Ursuline College	1,347	680	667
William Woods College	816	80	736
Wilson College	701	519	182
Total Enrollment for Master's I Women's Colleges	**20,280**	**6,641**	**13,639**
Brenau University	1,123	317	806
College of New Rochelle	3,960	747	3,213
Converse College	736	88	648
Emmanuel College	1,065	437	628
Georgian Court College	1,694	661	1,033
Hood College	951	282	669
Immaculata College	1,576	1,081	495
Lesley College	1,305	391	914
Meredith College	2,170	449	1,721
Russell Sage College-Main Campus	2,262	746	1,516
Saint Joseph College	1,194	651	543
Simmons College	1,299	155	1,144
Trinity College (DC)	945	636	309
Total enrollment for Master's II women's colleges	**6,547**	**2,760**	**3,787**
Chestnut Hill College	706	198	508
College of Notre Dame Maryland	2,453	1,788	665
College of Saint Catherine	2,230	545	1,685
Mount Saint Mary's College	1,158	229	929

NOTE: "Private 4-year women's colleges" refers to 64 private 4-year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Fall Enrollment" survey, unpublished data, tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 14—Degrees awarded by women's colleges by level: 1992-93

	Associates Degrees		Bachelor's Degrees		Master's Degrees		Doctor's Degrees	
Institution name	Total	Women	Total	Women	Total	Women	Total	Women
Total degrees awarded by all women's colleges	**2,572**	**2,405**	**16,717**	**16,099**	**5,459**	**4,610**	**151**	**124**
Total degrees awarded by all private 4-year women's colleges	**1,299**	**1,191**	**15,256**	**14,724**	**4,758**	**3,977**	**42**	**32**
Agnes Scott College	0	0	127	127	0	0	0	0
Alverno College	3	3	369	369	0	0	0	0
Barnard College	0	0	522	522	0	0	0	0
Bay Path College	174	174	47	47	0	0	0	0
Bennett College	0	0	94	94	0	0	0	0
Blue Mountain College	0	0	106	97	0	0	0	0
Brenau University	0	0	380	285	247	149	0	0
Bryn Mawr College	0	0	299	299	140	122	32	24
Carlow College	0	0	261	234	9	8	0	0
Cedar Crest College	0	0	183	177	0	0	0	0
Chatham College	0	0	121	121	0	0	0	0
Chestnut Hill College	0	0	142	141	76	64	0	0
College of New Rochelle	0	0	629	579	301	280	0	0
College of Notre Dame Maryland	0	0	315	300	63	59	0	0
College of Our Lady of the Elms	6	6	194	190	34	31	0	0
College of Saint Benedict	0	0	428	428	0	0	0	0
College of Saint Catherine	0	0	467	467	41	40	0	0
College of Saint Elizabeth	0	0	189	187	0	0	0	0
College of Saint Mary	118	115	107	98	0	0	0	0
Columbia College	0	0	226	226	11	11	0	0
Converse College	0	0	173	171	143	113	0	0
Emmanuel College	1	1	194	190	56	47	0	0
Endicott College	222	222	49	47	0	0	0	0
Georgian Court College	0	0	365	338	94	85	0	0
Hollins College	0	0	201	201	55	41	0	0
Hood College	0	0	261	235	165	107	0	0
Immaculata College	26	21	191	177	60	56	0	0
Judson College	0	0	57	57	0	0	0	0
Lasell College	138	138	73	73	0	0	0	0
Lesley College	1	1	469	360	1,762	1,453	1	1
Mary Baldwin College	0	0	276	252	7	6	0	0
Marymount College	0	0	223	214	0	0	0	0
Marymount Manhattan College	0	0	156	141	0	0	0	0
Meredith College	0	0	461	461	59	59	0	0
Midway College	119	118	23	23	0	0	0	0
Mills College	0	0	204	204	78	64	0	0
Moore College of Art and Design	0	0	97	97	0	0	0	0
Mount Holyoke College	0	0	506	506	5	5	0	0
Mount Mary College	0	0	262	262	23	22	0	0
Mount Saint Mary's College	93	90	169	166	34	24	0	0
Mount Vernon College	1	1	91	91	0	0	0	0
Notre Dame College	1	1	127	127	0	0	0	0
Pine Manor College	30	30	82	82	0	0	0	0
Randolph-Macon Woman's College	0	0	154	154	0	0	0	0
Regis College	0	0	205	204	0	0	0	0
Rosemont College	0	0	134	134	19	11	0	0
Russell Sage College-Main Campus	290	204	357	331	215	163	0	0
Saint Joseph College	0	0	185	183	150	132	0	0
Saint Mary-of-the-Woods College	7	7	128	128	11	9	0	0
Saint Mary's College (IN)	0	0	389	389	0	0	0	0
Salem College	0	0	122	121	20	19	0	0
Scripps College	0	0	153	153	0	0	0	0
Seton Hill College	0	0	150	140	0	0	0	0
Simmons College	0	0	339	339	636	575	4	4
Smith College	0	0	705	705	174	155	5	3
Spelman College	0	0	412	412	0	0	0	0
Stephens College	7	7	232	226	0	0	0	0
Sweet Briar College	0	0	145	145	0	0	0	0
Trinity College (DC)	0	0	137	137	45	43	0	0
Trinity College (VT)	18	11	192	166	0	0	0	0
Ursuline College	1	1	220	217	25	24	0	0
Wellesley College	0	0	611	611	0	0	0	0
Wells College	0	0	92	92	0	0	0	0
Wesleyan College	0	0	83	83	0	0	0	0
William Woods College	6	6	125	125	0	0	0	0
Wilson College	37	34	70	66	0	0	0	0
Total Degrees Awarded by Public Women's Colleges	**57**	**49**	**1,461**	**1,375**	**701**	**633**	**109**	**92**
Mississippi University for Women	57	49	343	289	24	22	0	0
Texas Woman's University	0	0	1,118	1,086	677	611	109	92
Total Degrees Awarded by Private 2-year Women's Colleges	**1,216**	**1,165**	**0**	**0**	**0**	**0**	**0**	**0**
Aquinas College at Milton	88	88	0	0	0	0	0	0
Aquinas College at Newton	51	51	0	0	0	0	0	0
Cottey College	136	136	0	0	0	0	0	0
Fisher College	447	412	0	0	0	0	0	0
Harcum Junior College	218	202	0	0	0	0	0	0
Peace College	161	161	0	0	0	0	0	0
Saint Mary's College (NC)	61	61	0	0	0	0	0	0
Southern Virginia College for Women	54	54	0	0	0	0	0	0

Note: "Women's Colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Completions" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 15—Bachelor's degrees conferred upon women, by private 4-year women's colleges by Carnegie classification: 1992-93

Carnegie classification and institution name	Number of degrees
Total bachelor's degrees awarded to women at Baccalaureate I women's colleges	**4,941**
Agnes Scott College	127
Barnard College	522
Bryn Mawr College	299
Chatham College	121
College of Saint Benedict	428
Hollins College	201
Judson College	57
Mills College	204
Mount Holyoke College	506
Randolph-Macon Woman's College	154
Salem College	121
Scripps College	153
Smith College	705
Spelman College	412
Sweet Briar College	145
Wellesley College	611
Wells College	92
Wesleyan College	83
Total bachelor's degrees awarded to women at Baccalaureate II women's colleges	**4,779**
Alverno College	369
Bennett College	94
Blue Mountain College	97
Carlow College	234
Cedar Crest College	177
College of Our Lady of the Elms	190
College of Saint Elizabeth	187
College of Saint Mary	98
Columbia College	226
Endicott College	47
Lasell College	73
Mary Baldwin College	252
Marymount College	214
Marymount Manhattan College	141
Midway College	23
Mount Mary College	262
Mount Vernon College	91
Notre Dame College	127
Pine Manor College	82
Regis College	204
Rosemont College	134
Saint Mary-of-the-Woods College	128
Saint Mary's College (IN)	389
Seton Hill College	140
Stephens College	226
Trinity College (VT)	166
Ursuline College	217
William Woods College	125
Wilson College	66
Total bachelor's degrees awarded to women at Master's I women's colleges	**3,786**
Brenau University	285
College of New Rochelle	579
Converse College	171
Emmanuel College	190
Georgian Court College	338
Hood College	235
Immaculata College	177
Lesley College	360
Meredith College	461
Russell Sage College-Main Campus	331
Saint Joseph College	183
Simmons College	339
Trinity College (DC)	137
Total bachelor's degrees awarded to women at Master's II women's colleges	**1,074**
Chestnut Hill College	141
College of Notre Dame Maryland	300
College of Saint Catherine	467
Mount Saint Mary's College	166

NOTE: "Private 4-year women's colleges" refers to 64 private 4-year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Completions" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 16— Degrees awarded by women's colleges, by level: 1976–77

Institution name	Associates Degrees		Bachelor's Degrees		Master's Degrees		Doctor's Degrees	
	Total	Women	Total	Women	Total	Women	Total	Women
Total degrees awarded by all women's colleges	**5,597**	**4,240**	**13,165**	**12,915**	**2,846**	**2,493**	**107**	**83**
Total degrees awarded by private 4-year women's colleges	**724**	**709**	**11,786**	**11,558**	**2,140**	**1,797**	**61**	**42**
Agnes Scott College	0	0	97	97	0	0	0	0
Alverno College	12	12	135	135	0	0	0	0
Barnard College	0	0	421	421	0	0	0	0
Bennett College	0	0	107	107	0	0	0	0
Blue Mountain College	0	0	74	59	0	0	0	0
Brenau College	0	0	94	65	9	8	0	0
Bryn Mawr College	0	0	193	193	127	87	54	38
Carlow College	0	0	161	157	0	0	0	0
Cedar Crest College	0	0	114	114	0	0	0	0
Chatham College	0	0	86	86	0	0	0	0
Chestnut Hill College	0	0	163	160	0	0	0	0
College of New Rochelle	0	0	398	339	318	282	0	0
College of Notre Dame Maryland	0	0	129	128	0	0	0	0
College of Our Lady of the Elms	0	0	94	94	0	0	0	0
College of Saint Benedict	20	20	284	284	0	0	0	0
College of Saint Catherine	0	0	354	354	0	0	0	0
College of Saint Elizabeth	0	0	113	113	0	0	0	0
College of Saint Mary	202	192	55	51	0	0	0	0
Columbia College	0	0	172	172	0	0	0	0
Converse College	0	0	148	144	50	37	0	0
Emmanuel College	1	1	237	234	33	30	0	0
Georgian Court College	0	0	161	161	0	0	0	0
Hollins College	0	0	191	191	46	26	0	0
Hood College	0	0	158	149	43	32	0	0
Immaculata College	0	0	148	142	0	0	0	0
Judson College	0	0	81	81	0	0	0	0
Lesley College	22	22	203	202	358	321	0	0
Mary Baldwin College	0	0	113	113	0	0	0	0
Marymount College	0	0	198	193	0	0	0	0
Marymount Manhattan College	0	0	317	310	0	0	0	0
Meredith College	0	0	297	297	0	0	0	0
Mills College	0	0	191	191	56	45	0	0
Moore College of Art	0	0	116	116	0	0	0	0
Mount Holyoke College	0	0	509	509	12	8	0	0
Mount Mary College	0	0	177	177	0	0	0	0
Mount Saint Mary's College	165	163	124	123	37	25	0	0
Mount Vernon College	81	81	63	63	0	0	0	0
Notre Dame College	13	10	60	60	0	0	0	0
Randolph-Macon Woman's College	0	0	150	149	0	0	0	0
Regis College	0	0	135	135	14	14	0	0
Rosemont College	0	0	133	133	0	0	0	0
Russell Sage College Main Campus	0	0	384	332	142	123	0	0
Saint Joseph College	0	0	146	146	84	72	0	0
Saint Mary-of-the-Woods College	2	2	137	137	0	0	0	0
Saint Mary's College (IN)	0	0	368	368	0	0	0	0
Salem College	0	0	109	108	0	0	0	0
Scripps College	0	0	104	104	0	0	0	0
Seton Hill College	0	0	160	160	0	0	0	0
Simmons College	0	0	398	398	478	423	6	3
Smith College	0	0	644	644	157	120	1	1
Spelman College	0	0	216	216	0	0	0	0
Stephens College	188	188	559	540	0	0	0	0
Sweet Briar College	0	0	124	124	0	0	0	0
Trinity College (DC)	0	0	98	98	173	141	0	0
Trinity College (VT)	0	0	105	99	0	0	0	0
Ursuline College	18	18	150	150	0	0	0	0
Wellesley College	0	0	466	466	3	3	0	0
Wells College	0	0	111	111	0	0	0	0
Wesleyan College	0	0	99	99	0	0	0	0
William Woods College	0	0	178	178	0	0	0	0
Wilson College	0	0	76	76	0	0	0	0
Total degrees awarded by public women's colleges	**92**	**92**	**1,379**	**1,359**	**706**	**696**	**46**	**41**
Mississippi University for Women	92	92	399	399	157	157	0	0
Texas Woman's University	0	0	980	960	549	539	46	41
Total degrees awarded by private 2-year women's colleges	**4,781**	**3,439**	**0**	**0**	**0**	**0**	**0**	**0**
Aquinas Junior College at Newton	248	248	0	0	0	0	0	0
Aquinas Junior College Main Campus	274	274	0	0	0	0	0	0
Bay Path Junior College	398	398	0	0	0	0	0	0
Cottey College	118	118	0	0	0	0	0	0
Endicott College	556	556	0	0	0	0	0	0
Fisher Junior College	1,546	206	0	0	0	0	0	0
Harcum Junior College	569	567	0	0	0	0	0	0
Lasell Junior College	415	415	0	0	0	0	0	0
Midway College	107	107	0	0	0	0	0	0
Peace College	225	225	0	0	0	0	0	0
Pine Manor Junior College	140	140	0	0	0	0	0	0
Saint Mary's College (NC)	88	88	0	0	0	0	0	0
Southern Seminary Junior College	97	97	0	0	0	0	0	0

NOTE: "Women's colleges" refers to 76 institutions identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

Source: U.S. Department of Education, National Center for Education Statistics, "Degrees and Other Formal Awards Conferred," unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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Appendix table 17—Number of staff at private 4–year women's colleges, by occupational category, sex, and Carnegie classification: Fall 1993

Carnegie classification and institution name	Total staff			Total professional staff			Professional staff: Executive, administrative and managerial			Professional staff: Full-time faculty			Professional staff: Part-time faculty			Professional staff: Instruction/research assistants			Professional staff: Other professional staff			Nonprofessional staff		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total staff at Baccalaureate women's Colleges	**8,097**	**2,882**	**5,215**	**4,601**	**1,563**	**3,038**	**765**	**205**	**560**	**1,912**	**886**	**1,026**	**559**	**220**	**339**	**153**	**45**	**108**	**1,212**	**207**	**1,005**	**3,496**	**1,319**	**2,177**
Agnes Scott College	283	99	184	157	47	110	19	4	15	66	27	39	24	10	14	10	2	8	38	4	34	126	52	74
Barnard College	675	235	440	430	123	307	136	31	105	164	64	100	99	24	75	0	0	0	31	4	27	245	112	133
Bryn Mawr College	543	199	344	257	92	165	79	19	60	105	56	49	6	3	3	3	0	3	62	11	51	286	107	179
Chatham College	150	53	97	101	28	73	31	9	22	51	18	33	0	0	0	0	0	0	19	1	18	49	25	24
College of Saint Benedict	340	127	213	241	87	154	8	3	5	125	50	75	25	13	12	0	0	0	83	21	62	99	40	59
Hollins College	334	130	204	180	69	111	71	20	51	74	42	32	25	6	19	0	0	0	10	1	9	154	61	93
Judson College	104	31	73	71	25	46	5	3	2	24	12	12	13	4	9	0	0	0	25	3	22	37	11	26
Mills College	477	150	327	331	89	242	54	8	46	70	31	39	74	23	51	84	23	61	49	4	45	146	61	85
Mount Holyoke College	1,047	356	691	512	188	324	49	17	32	211	111	100	57	19	38	0	0	0	195	41	154	535	168	367
Randolph-Macon Woman's College	331	104	227	181	57	124	32	10	22	69	35	34	25	10	15	0	0	0	55	2	53	140	47	93
Salem College	149	53	96	117	51	66	21	6	15	44	25	19	27	12	15	0	0	0	25	8	17	32	2	30
Scripps College	196	57	133	122	37	85	37	3	34	56	27	29	24	7	17	0	0	0	0	0	0	68	20	48
Smith College	1,243	492	751	668	259	409	66	25	41	283	144	139	54	32	22	0	0	0	265	58	207	575	233	342
Spelman College	475	149	326	292	98	194	54	10	44	131	51	80	67	33	34	0	0	0	40	4	36	183	51	132
Sweet Briar College	345	138	207	161	65	96	28	14	14	75	34	41	16	14	2	0	0	0	40	3	37	184	73	111
Wellesley College	1,091	383	708	575	175	400	34	10	24	260	111	149	0	0	0	56	20	36	223	34	189	516	208	308
Wells College	179	71	108	115	41	74	26	8	18	61	29	32	0	0	0	0	0	0	28	4	24	64	30	34
Wesleyan College	151	53	98	94	35	59	15	5	10	41	19	22	14	7	7	0	0	0	24	4	20	57	18	39
Total staff at Baccalaureate II women's Colleges	**7,101**	**2,035**	**5,066**	**4,521**	**1,315**	**3,206**	**615**	**138**	**477**	**1,471**	**547**	**924**	**1,139**	**394**	**745**	**223**	**86**	**137**	**1,073**	**150**	**923**	**2,580**	**720**	**1,860**
Alverno College	407	74	333	252	46	206	39	4	35	114	31	83	19	1	11	0	0	0	87	10	77	155	28	127
Bennett College	174	45	129	109	32	77	23	3	20	55	17	38	7	2	5	0	0	0	28	6	22	65	13	52
Blue Mountain College	54	6	48	46	16	30	7	3	4	25	12	13	7	1	6	0	0	0	7	0	7	28	10	18
Carow College	301	74	227	216	56	160	20	2	18	53	19	34	100	31	69	0	0	0	43	4	39	85	18	67
Cedar Crest College	272	81	191	196	59	137	28	5	23	68	33	35	64	18	46	0	0	0	36	3	33	76	22	54
College of Our Lady of the Elms	161	34	127	91	18	73	11	1	10	41	15	26	0	0	0	0	0	0	39	2	37	70	16	54
College of Saint Elizabeth	246	57	189	190	44	146	29	4	25	47	6	41	69	32	37	0	0	0	45	2	43	56	13	43
College of Saint Mary	221	61	160	178	50	128	15	1	14	44	11	33	99	36	63	0	0	0	24	2	22	43	11	32
Columbia College	252	84	168	166	57	109	29	9	20	75	31	44	37	13	24	0	0	0	25	4	21	86	27	59
Endicott College	373	80	293	224	51	173	42	11	31	40	12	28	0	0	0	89	23	66	53	5	48	49	29	20
Lasell College	218	62	156	141	35	106	9	2	7	27	8	19	76	19	57	0	0	0	29	6	23	77	27	50
Mary Baldwin College	302	114	188	153	56	97	15	6	9	71	38	33	14	6	8	0	0	0	53	6	47	149	58	91
Marymount College	304	100	204	215	73	142	9	2	7	56	22	34	96	42	54	0	0	0	54	7	47	89	27	62
Marymount Manhattan College	187	61	126	114	37	77	48	11	37	49	21	28	11	3	8	0	0	0	28	7	21	48	10	38
Midway College	167	45	122	119	35	84	5	2	3	39	10	29	47	16	31	0	0	0	19	4	15	118	26	92
Mount Mary College	267	56	211	149	30	119	23	4	19	52	10	42	52	12	40	3	0	3	19	4	15	118	26	92
Mount Vernon College	120	55	65	86	43	43	12	6	6	23	16	7	29	15	14	0	0	0	22	6	16	34	12	22
Notre Dame College	157	50	107	124	45	79	20	4	16	21	9	12	62	29	33	0	0	0	21	3	18	33	5	28
Pine Manor College	200	80	120	172	144	64	40	10	30	76	33	43	0	0	0	0	0	0	28	11	17	56	26	30
Regis College	295	79	216	191	30	161	29	7	22	51	13	38	55	6	49	0	0	0	56	4	52	104	49	55
Rosemont College	195	63	132	141	48	93	25	4	21	43	17	26	51	27	24	0	0	0	22	0	22	54	15	39
Saint Mary-of-the-Woods College	147	33	114	109	28	81	14	2	12	44	13	31	31	9	22	0	0	0	20	4	16	38	5	33
Saint Mary's College (IN)	460	144	316	262	94	168	33	13	20	106	49	57	76	24	52	0	0	0	47	8	39	198	50	148
Seton Hill College	254	80	174	126	30	96	11	2	9	56	23	33	0	0	0	0	0	0	59	5	54	128	50	78
Stephens College	286	122	164	139	51	88	24	8	16	62	30	32	19	6	13	0	0	0	34	7	27	147	71	76
Trinity College (VT)	269	80	189	182	58	124	16	6	10	44	21	23	53	19	34	0	0	0	69	12	57	87	22	65
Ursuline College	256	49	207	190	38	152	23	2	21	62	10	52	67	21	46	0	0	0	38	5	33	66	11	55
Wilson Woods College	307	30	277	73	14	59	10	2	8	0	0	0	7	2	5	0	0	0	56	7	49	234	16	218
Wilson College	329	116	213	195	87	108	6	2	4	30	13	17	3	1	2	131	63	68	25	8	17	134	29	105
Total staff at Master's I women's Colleges	**5,557**	**1,819**	**3,738**	**4,003**	**1,399**	**2,604**	**344**	**102**	**242**	**1,065**	**388**	**677**	**1,806**	**801**	**1,005**	**1**	**0**	**1**	**787**	**108**	**679**	**1,554**	**420**	**1,134**
Brenau University	1,550	510	1,040	1,167	461	706	71	25	46	61	27	34	60	20	40	0	0	0	39	9	30	53	9	44
College of New Rochelle	1,019	399	620	865	329	536	42	11	31	71	27	44	632	269	363	0	0	0	120	22	98	205	70	135
Converse College	217	76	141	131	52	79	23	8	15	74	43	31	2	1	1	0	0	0	32	0	32	86	24	62
Emmanuel College	136	27	109	103	21	82	15	1	14	0	0	0	41	11	30	0	0	0	47	9	38	33	6	27
Georgian Court College	374	141	233	245	105	140	36	7	29	71	29	42	110	63	47	0	0	0	28	6	22	129	36	93
Hood College	318	98	220	175	52	123	35	7	28	76	32	44	17	6	11	0	0	0	47	7	40	143	46	97
Immaculata College	298	103	195	149	57	92	1	1	0	31	12	19	102	41	61	0	0	0	15	3	12	149	46	103
Lesley College	430	76	354	330	65	265	35	9	26	128	33	95	36	11	25	1	0	1	130	12	118	100	11	89
Meredith College	401	125	276	267	73	194	6	4	2	102	35	67	98	23	75	0	0	0	61	11	50	134	52	82
Russell Sage College-MainCampus	857	393	464	689	359	330	66	30	36	167	66	101	386	254	132	0	0	0	70	9	61	168	34	134
Saint Joseph College	349	92	257	240	65	175	18	5	13	64	21	43	80	30	50	0	0	0	78	9	69	109	27	82
Simmons College	656	154	502	465	112	353	46	10	36	173	53	120	162	42	120	0	0	0	84	7	77	191	42	149
Trinity College (DC)	231	65	166	177	48	129	14	4	10	47	10	37	80	30	50	0	0	0	36	4	32	54	17	37
Total staff at Master's II women's Colleges	**1,303**	**371**	**932**	**817**	**204**	**613**	**129**	**20**	**109**	**307**	**97**	**210**	**236**	**69**	**167**	**1**	**0**	**1**	**144**	**18**	**126**	**486**	**167**	**319**
Chestnut Hill College	173	58	115	141	46	95	9	0	9	36	14	22	79	32	47	0	0	0	17	0	17	32	12	20
College of Notre Dame Maryland	265	69	196	145	33	112	36	7	29	76	25	51	8	0	8	1	0	1	24	1	23	120	36	84
College of Saint Catherine	473	130	343	263	59	204	51	10	41	131	40	91	16	1	15	0	0	0	65	8	57	210	71	139
Mount Saint Mary's College	392	114	278	268	66	202	33	3	30	64	18	46	133	36	97	0	0	0	38	9	29	124	48	76

NOTE: "Private 4–year women's colleges" refers to 64 private 4–year institutions falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993. William Woods College and Emmanuel College did not respond to the survey, and no data were imputed for full-time faculty.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Staff" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Learning (PLLI).

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Appendix table 18—Average salary for full-time faculty at women's colleges, by sex and Carnegie classification: 1993–94

Carnegie classification and institution name	Average salary for full-time faculty	
	Men	Women
Average salary for full-time faculty at Baccalaureate I women's colleges*	**$46,855**	**$40,830**
Agnes Scott College	$45,712	$40,401
Barnard College	$56,447	$47,320
Bryn Mawr College	$54,388	$47,365
Chatham College	$42,322	$31,882
College of Saint Benedict	$38,612	$37,826
Hollins College	$40,352	$36,638
Judson College	$31,844	$27,877
Mills College	$52,705	$45,572
Mount Holyoke College	$57,101	$50,297
Randolph-Macon Woman's College	$42,630	$38,945
Salem College	$33,543	$30,896
Scripps College	$57,141	$45,197
Smith College	$64,856	$54,424
Spelman College	$35,132	$31,445
Sweet Briar College	$48,824	$42,075
Wellesley College	$61,505	$59,406
Wells College	$46,029	$36,913
Wesleyan College	$34,253	$30,460
Average salary for full-time faculty at Baccalaureate II women's colleges*	**$34,698**	**$32,650**
Alverno College	$31,756	$31,151
Bennett College	$32,561	$32,196
Blue Mountain College	$27,065	$25,511
Carlow College	$37,030	$35,321
Cedar Crest College	$40,892	$34,490
College of Our Lady of the Elms	$33,117	$31,707
College of Saint Elizabeth	$31,092	$37,279
College of Saint Mary	$30,159	$29,979
Columbia College	$38,419	$33,402
Endicott College	$33,578	$32,318
Lasell College	$33,032	$31,633
Mary Baldwin College	$37,097	$36,447
Marymount College	$38,132	$34,157
Marymount Manhattan College	$36,926	$38,823
Midway College	$30,345	$30,331
Mount Mary College	$35,110	$30,215
Mount Vernon College	$34,851	$32,644
Notre Dame College	$27,431	$28,518
Pine Manor College	$40,213	$37,272
Regis College	$43,220	$39,921
Rosemont College	$42,350	$34,510
Saint Mary-of-the-Woods College	$34,183	$31,516
Saint Mary's College (IN)	$41,841	$36,312
Seton Hill College	$37,232	$35,925
Stephens College	$29,862	$26,577
Trinity College (VT)	$34,951	$30,110
Ursuline College	$29,856	$30,753
William Woods College	$32,969	$29,686
Wilson College	$30,985	$28,155
Average salary for full-time faculty at Master's I women's colleges*	**$40,945**	**$37,677**
Brenau University	$33,415	$28,726
College of New Rochelle	$44,225	$45,002
Converse College	$37,483	$36,258
Emmanuel College	$44,849	$35,843
Georgian Court College	$40,962	$39,836
Hood College	$41,881	$38,896
Immaculata College	$39,495	$37,777
Lesley College	$39,969	$34,593
Meredith College	$39,479	$34,977
Russell Sage College-Main Campus	$40,492	$35,953
Saint Joseph College	$45,387	$40,903
Simmons College	$50,657	$46,396
Trinity College (DC)	$33,999	$34,645
Average salary for full-time faculty at Master's II women's colleges*	**$36,564**	**$33,506**
Chestnut Hill College	$33,282	$29,962
College of Notre Dame Maryland	$37,762	$35,474
College of Saint Catherine	$36,633	$34,346
Mount Saint Mary's College	$38,581	$34,240

*Weighted averages computed by the National Data Resource Center.

NOTE: These salaries are for faculty on 9- and 10-month contracts only and are based on data that are different from the previous table. "Private 4-year women's colleges" refers to 64 private 4-year institutions, falling into 4 Carnegie classifications and identified as women's colleges in 1993. These institutions reported data to the U.S. Department of Education consistently from 1976 through 1993.

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) "Salaries, Tenure, and Fringe Benefits of Full-time Instructional Faculty" survey, unpublished data. Data tabulated by the National Institute on Postsecondary Education, Libraries, and Lifelong Learning (PLLI).

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